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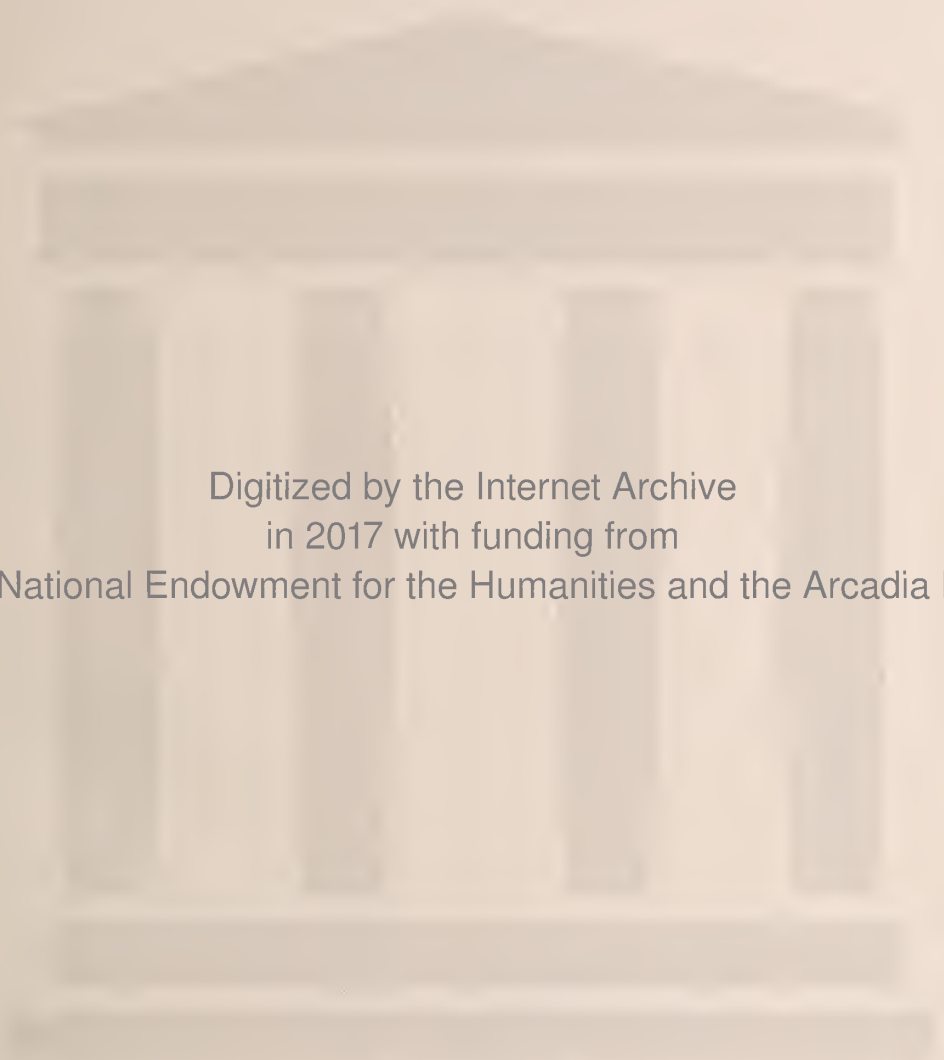
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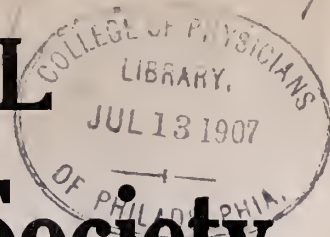
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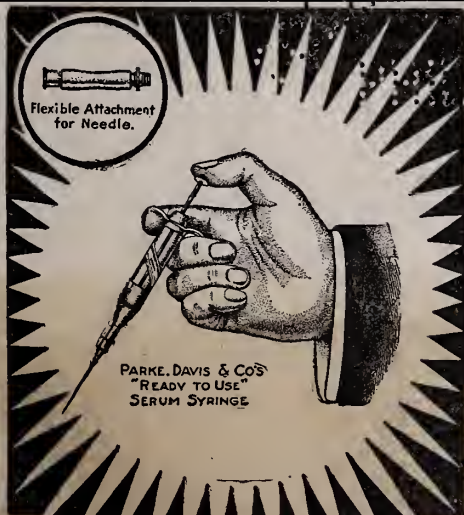
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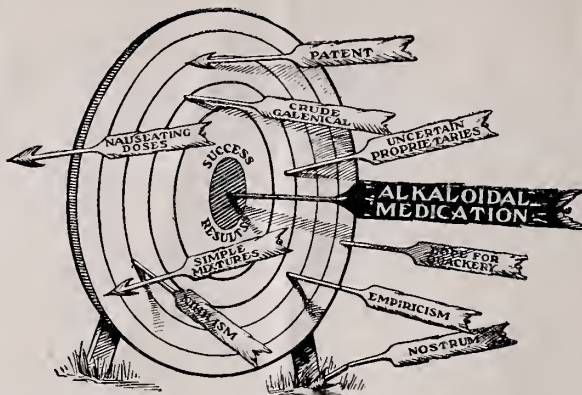
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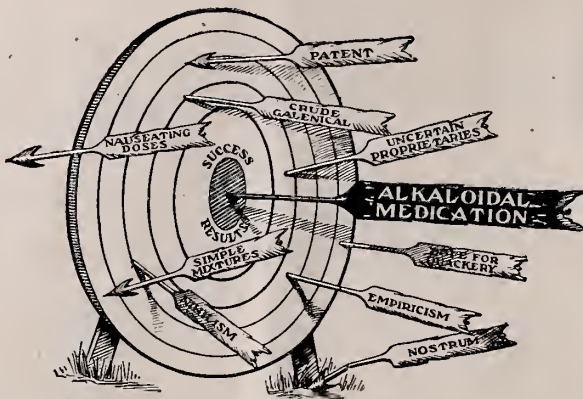
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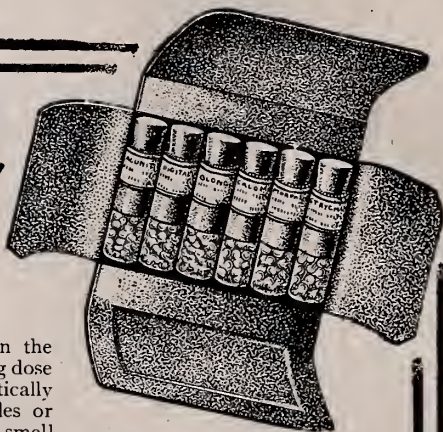
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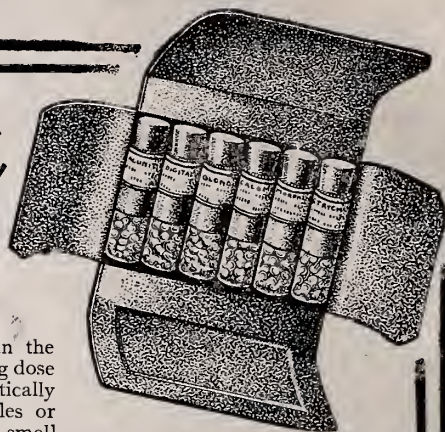
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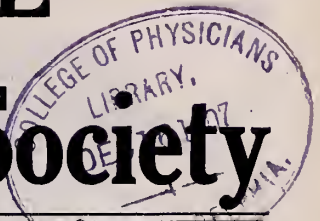
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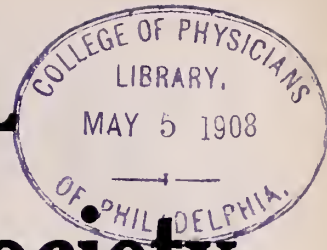
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To win success a physician must beware of getting into ruts and becoming "old-fashioned", of closing his mind against new truths. The world moves and Medicine with it! When a man ceases to progress, he commences to retrograde. Don't be a back number. **Investigate! Prove for yourself.**

Go slow in taking sides in controversies. Get the evidence on both sides and then prove things out for yourself. Assume always the position of judge and never that of advocate. **Be an investigator for yourself.**

Go slow in accepting negative arguments. They are not worth much, and are always worthless until subject to the crucial test of practical application. Go slow and sure but do not stand still.

Be always receptive to new ideas, but never prejudiced. Look for self-interest everywhere, and discount every man's argument by the violence of his assertion. Financial interests have long arms and do not like to have their methods disturbed or their profits reduced.

Get busy with your own mental furniture. Don't fail to give it a frequent overhauling. **Investigate!** Throw out the rubbish and fill your mind with the ideas and methods that are likely to be of the most practical benefit to you and your growing circle of patients.

Don't burden yourself with the incubus of precedent and authority. Learn to stand on your own feet. **Think** and translate your thoughts into action; then pass them on to your fellow men and to humanity. So shall you accomplish much!

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NO 1.

ADDRESSES

PRESIDENT'S ADDRESS.*

By C. Travis Drennen, M. D. Hot Springs, Ark.

Members of the Medical Society of the State of Arkansas:

Ladies and Gentlemen:—Another anniversary is now upon us and I extend to you a most cordial and happy greeting. You will permit me, I am sure, before entering upon the many duties of the hour, to express to you my high appreciation and gratitude for the distinguished honor which you conferred upon me in the city of Hot Springs about one year ago.

With a heart full of interest for the general welfare of the Medical Society of Arkansas and humanity everywhere, I now appeal to your generous forbearance and go direct to the duties which have called us at this hour.

Work for the Society.

You will permit me under head of Work for the Society, to say, that every reputable physician in the State of Arkansas should be enrolled.

We want the old men with their wisdom which comes by experience alone, and let no one raise the cry "out of date," or "old foggy," for the priceless treasures of which their hands are full are ours. Their hearts have ever been full to overflowing with sweetness and gentleness and love for the younger members of the profession, and when permitted they have flung abroad this wealth. In the name of Hippocrates and Galen, and all of the illustrious physicians of earth, let not one of these enter into his last resting place except he be enrolled under the banner of organized medicine. It is a disgrace to any Society today, within its jurisdiction, and particularly to the individual himself, to find a single young man who is not enrolled as its member. We want him for his

enterprise, his energy, his activity, and let no "old foggy" ever accuse him of being "pert."

Therefore, both old and young, and those at the half-way station of life must join us in our efforts. Centripetal attraction must oppose and overcome individualism. Common interests can be best protected by organization and collective effort, and centralization curtails the liberty of no man.

To be explicit, I mean that every Eclectic, Homeopath and Non-graduate who are now regularly enrolled under the laws of Arkansas should be eligible to membership in this Society. I am almost constrained to the belief that even other "pathys" and "isms," should be eligible to membership in this Society. In this connection, I can but regret that Alabama, my native State, did not promulgate the medical law just adopted by California, and that thereby Arkansas, Arizona and so on, the States in regular alphabetical order might have recognized her wisdom and have done likewise. This law licenses spiritualism, faith-healing, laying-on-of-hands, hydrotherapy, mesmerism, Christian science, holy rollers and "any other old 'dampholism,'" as one journal has expressed it. Arkansas would then have managed that affair through her State Board of Medical Examiners. Observe, if you please, how many, or how few, who have successfully passed the Board are inclined to restrict themselves to mental healing, vitopathy, etc.

There is not a regular practitioner in the State, within my knowledge, who may not use any treatment known today, and that too, without violating any State law. But, does he use spiritualism for a broken collar-bone? Does he use mesmerism for the expulsion of tape-worm? Does he use Christian Science for the treatment of suppurative appendicitis, or an ectopic gestation? Would he use absent treatment in a case of a little year-old child suffering from croup symptoms? Let a mother call a doctor at two o'clock in the morning and say to him over the phone: "Doctor, my baby has the croup, come immediately." Let the doctor answer: "It is not necessary, Madam,

*President's address at the Thirty-first Annual Session of the Arkansas Medical Society at Little Rock, May 14-16, 1907.

I will give your baby the absent treatment." Do you suppose that when that doctor finally revives he will know whether lightning struck him and took off the ear still hanging on the hook, or whether 'twas the "absent" but vociferous "treatment" administered by that outraged mother? Would he use vitopathy or the holy rollers in the case of a broken leg? Not if I were the patient. How about you?

Our present laws give 3,700 men and women in the State the right to practice the healing art in their own exclusive way, yet you may be sure that they do not do so exclusively, if they have ever had any sort of a liberal medical education.

All this fight against "pathys" appears to me like the case of the oldest kind of an old dog who is always chasing his own tail—right at it but not on it.

If we are wise, we will take all of these fellows, roll them into a pill, sugar-coat as best we can, then swallow, then forget. California has done it—can we?

This Society is now thirty-two years old. She managed during twenty-eight years to enroll about two hundred members. Since that time her membership has increased to a little less than one thousand. We have today within the neighborhood of 3,700 legalized practitioners in the State of Arkansas, enjoying all the rights and privileges which you are today enjoying. Fiction is an attractive thing in which youth always delights to revel, but facts furnish the steps upon which real men stumble and fall, or else ascend the heights.

One might as well attempt gathering the East wind on a winter day and confining it in one's vest pocket until July, as to expect 900 men to dominate the interests of 3,700 men, unless it be done through sympathy, the perfect 'love,' which is the potent factor in every real physician's character. The necessity for holding men outside of the Society, if it ever existed, passed away during our reorganization four years ago.

STATE BOARD OF EXAMINERS

The State Board of Examiners is today indifferent as to whether you or I hold a diploma from any sort of a school; it is only requisite to pass the State Board. Those of us who are at all familiar with its records stand ready to attest to the fact, that it is of little concern to them what you hold in the way of credentials, but you are registered by them upon what you possess within yourself. Every loyal physician in Arkansas and every lover of humanity should be happy of an opportunity to take off his hat to it for its good work. It cannot come today, but the time soon should come when this Board should be stripped of its cumbersome attire and be fitted to a point where it may operate more freely.

How can you ever hope to unite three or four Boards into one, until you take in confidence to yourselves these imaginary foes, who have in many instances and particularly in this, proven themselves our very best helpers?

State Board of Health.

It is beyond the ken of the average man to perceive how the intelligence of this State could have been so misdirected as to have neglected to make substantial provision for the protection of her citizens against pestilence and disease, thereby ignoring a condition which means so much to her commercial interest as well. This state of affairs could be easily remedied without the outlay of a single dollar by her citizens, as it only requires an act of the legislature to set aside for use in emergency a sum sufficient to maintain the dignity of the great State of Arkansas.

Medical Legislation.

Only can such disastrous and unfortunate conditions be done away with, when 3,700 men, who are protecting the lives and homes of our people, go to the Legislators and warn them of their dereliction in duty, instead of the ten hundred we now have. Until then, Peruna, Mother Winslow's Soothing Syrup and many quack remedies of our own State will continue to throng the legislative halls and teach in ways, which are unknown to the unsophisticated doctor, their wondrous benefit to mankind.

Never let a man represent us in Senate or Lower House who is unfriendly or even lukewarm toward the desires of organized medicine. Teach him that the interests of organized medicine are the interests of the community, the interests of the State, the interests of humanity. Go your full length and fall as hard as you can against any man who even winks at the other side. If the doctors in this country do not know what is best for the health of her people, pray, may I ask, in the name of High Heaven, who does?

Hot Springs.

Having lived in the city of Hot Springs during the last thirteen years, and having observed the many changes which have been wrought under a dual government during the past four years, I cannot at this time refrain from offering a few remarks, which I consider of grave concern, not only to the physicians of that little city, but to her whole population, as well as to the entire country. The basis of all valuation in the city of Hot Springs, Arkansas, is made directly upon the hot water and not an individual there owns one single drop thereof. The United States Government has complete control, and this being the condition, it should as well be understood first as

last, that it must be conducted in behalf of the whole people and not for the favored few. Has this condition maintained? No. You ask why, and I tell you today, that the privileges of the hot water have been granted by the Government entirely to private interests, with the single exception of the Army-Navy Hospital and the Government Bath House itself. Have these private enterprises developed th humanitarian interests for which these waters were primarily intended, or has it grown into a gigantic commercialism? What is the condition there today? Listen: First, we find a Superintendent of the Reservation, aside from his many other duties, who is in control of the bath houses. I will say further, he is an appointee of Mr. Roosevelt, ex-private secretary of Secretary Hitchcock, of the Interior, a most excellent gentleman, I am sure, and that which follows is not personal but is said respectfully and not offensively, though regretfully.

Our present Superintendent differs in nowise from those who have preceded him; is not a doctor, and he knows no more about blood-pressure and the influence of hot water on the sick, when applied either internally or externally, than a Fiji Islander does about the rottenness which flows down the political gutters of Arkansas. The sick and invalid class today who find their way to this blessed healing resort is not receiving, with possibly the single exception of the inmates of the Army and Navy Hospital, at the hands of the Government, one-half the consideration which the horses of Mr. Roosevelt's own stable receive. So far as the respectable members of the medical profession are concerned, not the sorriest dog in the poorest kennel in Arkansas, is less noticed than they.

In order that such error may be corrected and such flagrant abuses abolished, I take advantage of this opportunity to appoint a committee, whose duty it shall be to confer with the President of the United States, the President of the American Medical Association and the Chairman of the National Legislative Council of the American Medical Association, with the purpose in view of having a commission appointed, who will investigate and make suitable recommendations to Mr. Garfield, our present Secretary of the Interior, with the further object in view, of reorganizing the system which now maintains.

It is my privilege to appoint Dr. G. C. Greenway, Dr. Howard P. Collings, Dr. Thos. E. Holland of Hot Springs and the incoming President and Secretary of the Arkansas Medical Society.

State Journal.

Concerning all these matters no better agent, under existing conditions, could possibly be maintained, than a vigorous support of our own State

Journal. As to it's management, this Society is under everlasting gratitude to those who have gently taken it under their wing, during those trying times when the storms were raging and the nights were cold, and have brought to us the result of their efforts.

Long may the State Journal live to bless the people, and gladden the heart of the profession in Arkansas.

The Doctor's Life.

May I be permitted before closing, to grow confidential and say to you, the doctor's life is not always one of pleasure. All the day long he sees the old sores, the sins, the ignorance, the filth and poverty of the world and death at the end. But does all this mitigate against his unselfishness in behalf of the human race? See, whom do you find, in all countries civilized or otherwise, first on the battlefield and who is he who knows not the difference between friend or foe when it comes to sewing a wound or saving a human life?

The doctor is never happy to hear of sickness or pain. All the doctors on earth today, are binding themselves together with "hooks of steel" with purpose fixed to do away with disease. The real doctor is one who loves his fellow-man.

I read it in a book one day, did you? If not, I'll tell it to you now. The hour was eleven on a winter's night when the doorbell rang and the doctor appeared. A little girl stood at the door, "Would the doctor please go? I wouldn't ask you on a night like this, but mamma is very ill." The half-frown on the doctor's face is gone at the second remark, he looks at his big coat, the warm gloves, and he quickly pushes the button for his man. Later his carriage comes, he tucks the little one in beside him and—on his way. The home is reached and after his examination is made he exclaims, "Good God, Pneumonia!" (for you know doctors will say things sometimes) "how could she stand it? It would have killed a horse." Then to the kitchen he goes, then to the nearest neighbor to borrow some coal, after which he builds the fire, having dispatched his man for a nurse. A long fight and a hard one—the battle is won. A bill comes from the coal man, the grocer, the nurse, and many, many others, to the Doctor, which are paid. The woman receives no bill at all, there is no entry on the Doctor's book against her. On the credit side of his conscience, however, he glories and revels in the consciousness of duty done. What greater blessing can come to mortal man?

The Doctor has both patience and skill and for his many good deeds in behalf of his fellowman, may he never have to take his own remedies; but may each moment of pain he has spared

others, shine like stars in his crown and at last when the grim Reaper calls him hence, let him recognize in the doctor, a generous but worthy foe and treat him accordingly.

Let us finally hope he may live to see his advice followed, his patients cured, and all his earthly bills paid, knowing that on the other side:

"Only the Master shall praise us
And only the Master shall blame
And no one shall work for money
And no one shall work for fame.
But each for the joy of working
And each in his separate star
Shall draw the thing as he sees it,
For the God of things as they are."

THE VALUE OF ORGANIZATION IN MEDICINE.*

By John A. Wyeth, M. D., LL. D., New York.

Intelligent co-operation between individuals for the accomplishment of a given end, has marked every step of human progress. Beginning with the organization of families into tribes, and these into states and nations, the more enlightened peoples of the earlier days became masters of the world about them. Naturally when man was nearer to the savagery from which he was emerging, the trend of organization was in the direction of arms and war. But for this obedience to the laws of discipline and co-operation, the death of Cyrus would have made impossible the famous retreat of the 10,000. It was organization which enabled Alexander, with his handful of Macedonians, to destroy the hosts of Darius, and lay the Orient as far as the Indus under tribute. Without it the thinned legions of Caesar could not have conquered Gaul. Without it that matchless army of which Theodore Roosevelt writes: "The world has never seen better soldiers than those who followed Lee," could never have marched on and on to a succession of victories unparalleled in all the history of War.

Scarcely a page of history fails to convey the lesson of the value of organization, and yet for thousands of years, man made of it only an agency for destroying life

How slow has been the progress toward a higher and purer civilization. How long the shadows of barbarism have lingered about us. Our heroes are still the destroyers, the Caesars, the Napoleons, who covered the earth with ruin and buried beneath it countless lives sacrificed upon the altar of a personal ambition. But the day will come

when those whose genius and work give life and health and happiness to the world will be first in the hearts of men. In this future temple of fame in the highest places reserved for the benefactors of their kind, the names of Jenner, McDowell, Morton, Marion Sims, Pasteur, Lister, Behring, and Virchow and others of our noble profession will be inscribed.

Already in this, our day, there are signs of the dawn of this higher civilization, for it has been left chiefly to the profession of medicine to apply the lesson of organization to the amelioration of suffering and the saving of life.

This is not the place, nor is there time for even a brief sketch of medical organization. Suffice it to say that to the dawn of the eighteenth century, comparatively little had been accomplished. Toward the latter part of that century, and in the earlier years of 1800, there were signs of dissatisfaction with existing conditions in the profession, and although these took more definite shape toward the middle of the nineteenth century, it was not in fact until our own period that there came the great awakening.

Two important events occurred in the decade from 1840-1850. At the annual meeting of the Medical Society of the State of New York in 1844, attention was strongly directed to the subject of medical education and the necessity of a higher standard of qualification both preliminary and medical. This same progressive body, at its annual session in 1839, had insisted that the subject of medical teaching should be separated as far as possible, from the privilege of granting diplomas. They invited a convention of other States to co-operate with them in this proposition, but neither the societies nor colleges invited responded to the invitation. Not despairing, the State Society again took up the matter in 1844, and it was at the meeting of this society in February, 1845, that Dr. N. S. Davis, a delegate from Broome County, introduced the following preamble and resolution:

"Whereas, it is believed that a National Convention would be conducive to the elevation of the standard of medical education in the United States; and whereas, there is no mode of accomplishing so desirable an object without concert of action on the part of the medical colleges, societies, and institutions of all the States, therefore,

Resolved, That the New York State Medical Society earnestly recommends a National Convention of delegates from medical societies and colleges in the whole Union, to convene in the city of New York, on the first Tuesday in May, in the year 1846, for the purpose of adopting some concerted action on the subject set forth in the foregoing preamble.

*Read in the Section on State Medicine and Public Hygiene of the Arkansas Medical Society, at the Thirty-first Annual Session, held at Little Rock, May 14-16, 1907.

In 1846 the proposed organization of a national body took definite shape, and in 1847 the American Medical Association was organized. Among the definite objects then stated were the following:

1. The standard of preliminary or preparatory education should be greatly elevated, or rather, a standard should be fixed, for there is none now, either in theory or in practice.

2. We should elevate the business of private teaching to that position which its intrinsic importance demands.

3. A more uniform standard of qualifications should be required of the candidates for medical honors.

4. We should devise some mode to stimulate the ambition, and arouse the energies of the profession to a higher state of intellectual activity and scientific inquiry.

While the proposed organization of a national association was exciting so much interest, a number of distinguished physicians in New York City, on November 18, 1846, met and proposed the foundation of the New York Academy of Medicine, and this organization was completed on January 13, 1847. From these dates, the influence of these two bodies made themselves felt in our profession, and it is a coincidence of possible interest, that in 1846 the great boon of anesthesia by the use of sulphuric ether was given by America to the world, and in 1847, England contributed an equal blessing in the discovery of the practical uses of chloroform.

As far as the history of the medical profession in the United States is concerned, in my opinion, the most important event occurred in 1900, when the American Medical Association appointed a Committee on Re-Organization, which committee submitted its report at the annual meeting of the Association at St. Paul, in 1901. The object of the proposed re-organization was:

"To federate into one compact organization the medical profession of the United States, for the purpose of fostering the growth and diffusion of medical knowledge, of promoting friendly intercourse among American physicians, of safe-guarding the material interests of the medical profession, of elevating the standard of medical education, of securing the enactment and enforcement of medical laws, of enlightening and directing public opinion in regard to the broad problems of state medicine, and of representing to the world the practical accomplishments of scientific medicine."

To the consummation of this object, the officers and members of the national body devoted their time and influence without stint. They formulated a practically uniform system of organization for county and state societies throughout the Union. They designated an officer of this body, thoroughly

familiar with the plan of re-organization, whose duty it was to visit all parts of the country where his services might be of possible benefit in the organization of the various co-ordinate county and state societies. The results have shown not only that their far-reaching plans were well laid, but that the profession at large had reached the point of readiness for national co-operation. From the year 1900 it may be safe to assert the great progressive movement of the medical profession began.

One of the most difficult problems connected with this great undertaking was the adjustment of differences which had divided some of the state societies into factions, and especially that which had prevailed in the Empire State. It was to the consummation of this end that, at the request of the members of the New York Medical Association present at St. Paul in 1901, the American Medical Association voted unanimously to hold the meeting of 1902 at Saratoga. At this meeting a great step forward was made in the settlement of the differences between the Medical Society of the State of New York and the New York State Medical Association, and this, with the aid of the most influential and broad-minded men of both State organizations, together with the active co-operation of the officers and controlling influences of the National Association, brought about the great triumph of 1905.

The enthusiasm with which this triumph was acclaimed at the Boston meeting in June, 1906, was evidenced not only by the largest registered attendance in the history of the American Medical Association, but by the election to its presidency of Dr. Joseph D. Bryant, a former President of the New York Academy of Medicine, and at that time the retiring President of the Medical Society of the State of New York.

As a result of this wise conservatism, in our own great State, instead of two divided factions, this re-organization has united into one harmonious body the 10,000 regular practitioners in the Empire State, of whom already 6,578 (65 per cent) were on December 24, 1906, classed as members of the re-organized society.

As to the National Association, the success following the initiative at St Paul in 1901 has been equally gratifying throughout the Union. In January, 1901, there were 9,840 members of this Association; in January, 1907, the membership was 26,550.

In 1901, the circulation of the Journal of the American Medical Association was 18,840; today it is 50,000. In other words more than one-fourth of the regular medical profession of the United States is now enrolled in the National Association, while its great weekly publication, representing a paid-up investment of a quarter of a

million dollars, is mailed directly to one-half, and is in all probability, through the various circulating libraries, read by at least 60,000 physicians within our own borders.

The plan of re-organization promulgated by the American Medical Association has been accepted almost without exception in the 51 political divisions of our country. It has as its foundation, the organization of a county society in every county in the United States. It declares that membership in the county or district societies shall constitute membership in the respective state or territorial societies without further dues, and that no one be admitted to the state society except through the county or district organization.

Of the entire 51 political divisions, 41 are organized on this county plan, and in these there are 2,577 counties, over 2,000 of which number have already organized societies, leaving less than 500 counties not yet organized. A consideration of the conditions prevailing in the unorganized counties will show with what unanimity the general plan has been accepted. For instance, 110 unorganized counties are in the State of Texas, and many of these not only are not organized politically, simply appearing as laid out on the map, a large number having no physician residing within their limits. In Georgia the county plan has only been in force a little over a year, yet within this short period 100 of the 148 counties have reported organization, with a paid membership of 1,188. In Nevada, Utah and Wyoming, on account of sparse population and insufficient means of communication, a considerable number of county societies have not yet been organized. Idaho and North Dakota are organized on a combination of the county and district plan; the state organization in each, however, covers the entire state. In the District of Columbia, there is, of course, no county society, but only the medical association of that district. In Maine and Virginia, as yet, the state societies have no affiliated county organizations. In Iowa, prior to the re-organization under the new plan, county societies were few and far between. There was at no time over 500 members. There are now 1,842, with every county in the state organized. A medical friend writes: "Those of us who have kept in touch with the sentiment of the profession, feel that the vast majority are pleased with the plan now in vogue, and I firmly believe there is a better spirit in the profession." When the Minnesota State Medical Association was reorganized in 1903, they had a membership of 400. They have at this date 1,162, with a representative organization in every county of the state.

In your own State of Arkansas, of your 75 counties, eleven are as yet without an organized medical society. With a membership in the State

Association of nearly 1,000, you should see to it that every county has its representative body. There are approximately 4,000 doctors in the State, 500 of whom are not eligible to membership; this leaves 2,500 regular practitioners who are not enrolled in any medical organization. This proportion is too large. I have implicit faith in my brothers of the profession in this great State in which I spent the first three years of my career, and I prophecy that their zeal and devotion will bring a large proportion of those who are still outsiders into the organized fold.

As an illustration of what may be accomplished by intelligent co-operation, I would invite your attention to the plan adopted by the State of Alabama. Every physician who holds that the highest ideals of medicine are not those which pertain to material gains should read with pride the chief declaration in their plan of organization, which is "to promote the establishment of a high standard of professional and medical education for medical men, to foster fraternal relations, and thus develop a spirit of loyalty to pure and exalted principles."

Every county in that State has a regular organized society, and in three counties where there are some 60 physicians, every practitioner belongs to the county society. Of 1,500 registered legal practitioners, 1,067 belong to the State Association, and at the last meeting in 1906, 406 members, practically one-half of the membership, and almost one-third of the entire number in the State, were registered in attendance.

With all that we have accomplished within the first six years of the incipency of this movement, there remains much to be done. Two-thirds of our profession are as yet "Without the walls." We must win them, or at least the best of them, to our standard. We must teach them and the public, by precept and example, that our material advancement is secondary to our obligation to mankind.

There are at this date in the United States probably 30,000 illegal practitioners of medicine, so deficient in equipment professionally and morally, that they are a menace to the welfare of the communities they infest. There are medical colleges not yet up to the standard of our requirements. There is scarcely a community within our border that does not in some way violate the ordinary laws of health. The disposition of sewage, the pollution of the water courses, the housing and feeding of our crowded centres of population, the control of epidemics; these are but a few of the long list of problems with which we are face to face.

The real value of organization in medicine is in the influence we can bring directly to bear upon the body politic, and through this medium secure

the legislation which will solve these serious problems, and we can only do this by intelligent co-operation and by the sacrifice of much of our material interests to the public good. Organized medicine should take more note of politics. We should send some of our representative men to our state and national legislatures. We would do well to take as our model in our efforts by organization to accomplish all that is possible for the good of mankind, that great physician, great scientist, great philanthropist, and great politician, the immortal Virchow.

THE MEDICINE OF THE PHYSICIAN.*

By C. S. N. Hallberg, Ph. G., Member of the Council on Pharmacy and Chemistry of the American Medical Association.

Mr President, Ladies and Gentlemen:

It affords me great pleasure to have this opportunity to speak to you on a subject which has received a great deal of attention by the officers of the American Medical Association; the question of the medicines that the physician uses. You all know that there is a standard work which contains all the old-time medicines, the Pharmacopeia. The Pharmacopeia is essential to the practice of medicine. It is necessary to have uniformity in drugs and medicines. Without uniformity, a physician is very much handicapped in his work. Of course, it is a foregone conclusion that every civilized country has a Pharmacopeia. Every country in Europe, and at least six of our sister Republics have Pharmacopeias. They were really the outgrowth of private books. The old-time dispensaries up to the nineteenth century were devised by medical authors in the various large centers of Europe, but it was found that there was so much difference in the strength unit of the medicines, the formulas which were given in these dispensaries, that the medical men finally, together with the governing authorities in European countries, got together and formulated a standard. At first these were largely issued by the great cities; thus we had in effect until about thirty years ago the Pharmacopeia of London, of Dublin, of Edinburg. These were united about that time to the British Pharmacopeia. The present United States Pharmacopeia was first issued by a convention of medical men in 1820. It has been revised every ten years since. At every decennial period, as you know, there is a convention in Washington made up of delegates of medical associations, medical colleges, pharmaceutical associations and pharmaceutical colleges. For the last thirty or forty

years the medical associations have not taken that interest in the Pharmacopeia that they did formerly, and have left the work largely to pharmacists and pharmaceutical teachers, chemists and botanists. The present Pharmacopeia, which was revised by order of the convention of 1900, was issued about two years ago, and became official about a year and a half ago. Until this year, the United States Pharmacopeia has not been a legal standard throughout the States. It is true that wherever a State law existed having an adulteration section, for example, as most pharmacy laws have, the United States Pharmacopeia was the standard. The United States government, in all its medical service, in the army, navy and marine hospital service, to a limited extent in the internal revenue department, and quite extensively in the customs service, has always recognized the United States Pharmacopeia, but outside of that it was not legal authority in the United States or recognized by Act of Congress until this year. As you know, the passage of the Pure Food Act made the United States Pharmacopeia the official standard for all drugs, chemicals, and medicines, and went into effect the 1st of January, 1907. The Pharmacopeia, now official, is without question the most comprehensive and the best pharmacopeia of any country in the world. There are a great many medicines of more or less ephemeral character, also more or less adapted to extemporaneous compounding, that do not perhaps properly belong in the Pharmacopeia. About twenty years ago it was thought desirable to have uniform standards for these preparations also. Before that time every manufacturer had pretty much his own formula. Thus, in some of the elixirs, I. Q. and S. for example, the strychnine content varied considerably. Some manufacturers would have 1/64th of a grain to the teaspoonful to the average adult, others would make 1/84th, some 1/100, and some 1/120th of a grain of strychnine to the fluid drachm. In that way, as had been formerly the case before the pharmacopeias were issued, there was a great lack of uniformity in these mere extemporaneous preparations. So, the American Pharmaceutical Association and the National Association of Pharmacists and Druggists devised the work which was called the National Formulary. This has been revised twice. Last year appeared the third edition; and this, by the same official Pure Food Act also was recognized as the standard. So, we have at the present time the United States Pharmacopeia, with one thousand titles nearly, and the National Formulary with five hundred titles of what are called usual pharmaceutical preparations. Now, it is believed that, with the exception of extraordinary cases, these fifteen hundred articles comprise nearly everything in the way of drugs,

*An impromptu address delivered before the General Meeting of the Arkansas Medical Society held in Little Rock, May 14-16, 1907.

medicines and chemicals that the physician requires. But the physician in therapeutics is largely led by fashion, and it is impracticable, if not impossible, to have in the Pharmacopeia, or even in a supplemental work like the National Formulary, all the different preparations that come and go that the physician, whose field is the world and everything in it, under and over it, uses in the cure of disease. He, of course, must not be limited in his resources. The physician must try everything in the way of remedies that furnishes reasonable relief in the matter of disease, and, therefore, whatever standard we may have must necessarily be revised at certain periods; for instance, the United States Pharmacopeia every ten years. Therefore, we cannot expect to have everything that the physician should use, or would use, in these standard works. With that exception, as well as the novelties of synthetic chemistry, the great mass of benzine compounds and similar synthetic chemicals that come from Germany mostly, the novelties of pharmaceutical elegance, cannot very well be represented in these two works. But, with these two works, the question has often presented itself to the medical profession, those who have the best interests of the practice of medicine at heart, "Do the physicians avail themselves of these standards to the extent that they should?"

You know very well that during the last twenty-five or thirty years there has grown up a class of preparations simulating the elixirs first brought out thirty or thirty-five years ago, that was quite an advance in elegant medicine. They were palatable, they were effective, and seemed to respond fairly well. They were mostly designated by well known pharmaceutical terms or titles, the title indicating the composition. They were usually specified by the particular maker. They were fairly reasonable preparations and considered safe. If a physician desired to use any elixir, pill, mixture or liquid, that was not in the Pharmacopeia, or was not in the National Formulary, if he did not have the formula in his own mind, and he could not find a pharmacist competent enough to carefully make it, he could then specify one of these preparations made by some well-known manufacturing pharmacist. Some of the most scientific men, one man, at least, one of the greatest medical men in this country, Dr. Squibb, for example, for many years followed this method. He had no secrets; he had no trade names. All his preparations and manufactures were known by pharmaceutical, scientific and technical terms and titles, and all the privilege he had was that when a physician desired or preferred his particular product, that he specified "Squibb's." But there were men who knew little or nothing of either medicine or pharmacy, but who had an eye

to business, who thought they saw a field whereby they could exploit themselves on the medical profession, and so began, thirty years ago, perhaps, another kind of preparations; often not very different from these old-time regular pharmaceuticals in composition, but always more or less disguised with names coined, trade names, which were, of course, controlled by the particular manufacturer, and thus became eventually a monopoly. Not being based upon any novelty or discovery, they were, of course, not amenable to patent. Had they been patented, they would have had a monopoly on the preparation, say, for seventeen years; possibly a few years more, and then it would have become public property. But a trade mark or copyright is practically a perpetual monopoly. There is no such thing as limitation on authors or books. Congress has wrestled with this question for years, and has not been able to decide just the number of years that a trade mark or copyright of a book, for example, should run; the same holds true with medicine. Practically it is a perpetual monopoly. Now, along with this went a great deal of secrecy. Usually a formula accompanied the advertisement as well as the literature that was sent out for the particular preparation. It was the formula which attracted the doctor's attention. He thought, "There is a good preparation." He received samples of it. It seemed to taste, look and act fairly well, and so he began to use it. He forgot the Pharmacopeia. The result has been what? The result that nearly all of these original proprietary medicines of this kind, originally devised and advertised for the exclusive use of the medical profession, have irresistibly gone to the laity. Here is Scott's Emulsion of Cod Liver Oil, one of the very first ones which was advertised to the medical profession, and until a few years ago every bottle of his preparation that was sent out, which was flaunted on every rock and fence post throughout this country as curing consumption, had a circular containing the endorsement of Jas. Allen Adams, President of Rush College, and Joseph P. Ross, Professor of Diseases of the Throat and Chest. That's simply an illustration. Others have gone the same way. Take Fellows' Hypophosphites, Gude's Pepto mangan, or Antikamnia, the wonderful synthetic, the twentieth century alchemic product of St. Louis.

Now, they are engaged in exploiting Antikamnia and its combinations, codeine, etc., which bids fair to rival even the methods of glycozone. Of course, it is not necessary for me to dilate upon this state of affairs. Every physician must know it. He will have it brought to his attention all the time. Their methods are peculiar. The physician has not realized the full effect of giving support to these preparations. Of late years the slogan has been, "Prescribe in original packages to avoid

substitution;" and thus the doctor prescribes the preparation. The druggist often tries to remove all evidences of its origin, but, with the name blown in the bottle, he cannot efface that. The result is that the public soon finds out about these preparations. They not only buy them on their own account, but they recommend them to their friends and neighbors. They reason like this: Why should we pay a physician a fee to prescribe patent medicines? There are many instances that have come to our notice where a layman will have consulted a physician, and got a prescription of some proprietary medicine. I saw one of those in Hot Springs day before yesterday. A patient brought it in to the druggist and said, "Isn't that so-and-so?" "Yes." "And is not that Kuttnow Powder?" "Yes." He said, "Never mind, you need not put that up. I have tried every one." He was a sort of drug fiend and hypochondriac, and imagined there was something the matter with him all the time. He preferred the preparations because he thinks they are ethical, on a little higher scale than the ordinary patent medicines. Why should not that be, because many of them, if not most of them, have a high endorsement and are recommended by the medical fraternity.

There is so much to be said on this subject, Mr. President, that I hardly know where to begin. I don't want to inflict myself upon you, or take up too much of your time, but I will endeavor as briefly as I can to point out some experiences we have had in these medicines. Let me first briefly state that this question has been a burning one before the American Medical Association, particularly on account of its Journal. It came up in connection with the advertising. It has been the *bete noir* of every publisher as well as editor of medical journals for years, and chiefly why? No matter how much the publisher or editor tried to protect the pages of the medical journal and keep them clean from patent medicines, he could not tell very well the good from the bad. It was difficult to know where to draw the line. The Trustees of the American Medical Association finally, some years ago, adopted a rule or by-law that no advertisement should appear in the Journal without a formula. So, every one of these medicines advertised had to have the formula appear with it. That went along for a number of years until it was found that even the practicing physician began to doubt the correctness of the formula. They would complain to the Journal that these medicines, such and such a medicine advertising in there, gave a formula which they thought was not correct. And upon examination, it was shown that it was not correct, and very easily sometimes; sometimes from the fact that by writing the advertiser suggesting that the formula was not exactly right,

which he acknowledged at once and sent another one, and if any doubt was raised on the formula, he was perfectly willing to send still another formula, every time different. A formula is nothing but a formula. The formula is a delusion and a snare. Finally, about three years ago the Trustees of the Association, after going through all this, decided that there was only one way to do, and that was to assume responsibility to examine into the claims of these preparations and endeavor to find out which were true and which were false. Consequently, the Council on Pharmacy and Chemistry was created by the Trustees a little over two years ago; a council of fifteen, five chemists, five pharmacologists and five pharmacists; and this committee of fifteen issues weekly bulletins every Thursday, in which all these preparations are taken up and discussed. So far, on the new and non-official remedies, there have been two hundred and fifty articles which have been passed on and approved by the Council on Pharmacy and Chemistry. They are made up largely of the German synthetics; also synthetics and chemicals of American manufacture; also specialties that are of well-known composition and are not exploited in a manner that would be objectionable. These bulletins contain nothing, of course, that is in the Pharmacopeia or the National Formulary. They contain those things which cannot go in either of these books, as I mentioned in my preliminary remarks, such as come by fashion, that come and go. However, in doing this work the Council has had many peculiar experiences. I might say that there are about three or four kinds of preparations that may be classified into three or more classes for the purpose of briefly pointing out their peculiarities.

We have, first, for example, those of fictitious formula or composition. There is only one simple English term (if we may call it English) by which to designate them, and that is "fake." I have in mind one preparation that is not an objectionable preparation *per se*. Some of the best men in this country have used Tongaline, and yet there is the fullest evidence that tonga after which the preparation is named and which is supposed to be its chief constituent, is not to be had any more. There has not been any imported into the United States for the last five years. The manufacturer acknowledges it, and says, "What of it? We found it was so difficult to get, it was so expensive we found something else that was much better, so we left it out." But, was the formula changed? No. The formula is still there. The formula is nothing to them. We have evidence where cocaine, for example, as potent and as insidious an agent as it is, has been taken out of the formula and put back again without changing the formula; and

where croton oil has been put in one of those patent medicines and taken out and put back again without changing the formula; where permanganate of potassium has been put into an antiseptic solution, when it was as clear as water, and when it was questioned as to its color the answer was, "We don't put it in any more, we just leave it out." What else can you expect?

Remember, that most of these men are laymen. They are neither pharmacists, chemists nor physicians. Sometimes it is some medical man who has failed in getting a practice, perhaps, and comes across some old formula or old receipt, and gets somebody to make it, and exploits it. We must remember that fact in order to know the peculiar composition of the formula.

Another class of preparations are the deceptive preparations, the Free Cod Liver Oil Emulsion, for example. Whatever virtue there is in cod liver oil, aside from the hypophosphites, is the medicinal agents added to it. I find preparations of cod liver oil said to be without grease. Cod liver oil without the grease! Advertisements in reputable medical journals actually permitting a slogan like that to be printed, which, to a person of the most ordinary knowledge, is simply an absurdity.

Then, we have the petroleum emulsions. Here we have a line of preparations alleged to be tasteless, or rather palatable and agreeable preparations of petroleum; emulsions, for which are claimed all the virtues of crude petroleum, the free literature that goes with it, equalling the cryptograms way back in the Dark Ages, wonderful properties are ascribed to crude petroleum, both internal and external. Then, they go on and say that owing to the disagreeable odor and taste, "it fell into disuse until our celebrated chemists succeeded in purifying it in such a way that we can make an agreeable, palatable preparation." Now, that agreeable, palatable preparation is what? It is the emulsion of paraffin, of petrolatum, of vaseline. In purifying the petroleum, the sulphur and carbon compounds are eliminated, as in the manufacture of petrolatum and vaseline and the preparations made from them; but in purifying it those principles upon which its medicinal virtues depend, if it has any, are also eliminated. There is absolutely no virtue in petrolatum or paraffin taken internally. It is one of the most inert substances we have. Boiling in sulphuric acid does not faze it. Yet, the preparation is recommended for all the different diseases, diseases of the different organs. One I remember begins with the diseases of the chest, throat, respiratory organs and lungs, and the digestive apparatus, and finally gets down to the kidneys. Now, that can't have any possible effect, paraffin cannot be assimilated or digested in any way; it is voided intact. It is alleged by some medical writers that it may

act as a lubricant. If it acts as a lubricant, it is more likely to do harm than good, and besides, I guess that atom known as the human body is not a bicycle or automobile that requires a lubricating medium of that kind. (Applause.)

Then, there is another class of substances which are not objectionable *per se*, perhaps. Well, I will first mention one that is objectionable, because they are peculiar and insidious. Take, for example, some of these salts that are exploited by the Uric Acid Monthly. A bottle of 30 oz. of effervescent salts containing one or two ounces of lithia, sells, I believe, for \$1.25. Nothing in the world but just effervescent sodium phosphate, an alkali, with a little citrate of lithia in it, and for that simple preparation is made the most wonderful claims.

Then, there are some preparations which on the face of them would at once inspire confidence, and yet are just as deceptive as they can be; some of these preparations are for external use.

One of the most striking experiences that the Council had recently was with a comparatively inoffensive preparation, an antiseptic powder made in Washington, a great convenience to the medical men, a combination to be dissolved with so much water and used for antiseptic purposes. The manufacturer of this claimed that this was a mixture of equal parts of alum and borax, with a little carbolic acid, glycerine, and the crystallized principles of thyme, eucalyptus, gaultheria and mentha in the form of a powder. He insisted again and again that that formula was correct. Finally, after a great many analyses had been made of the article from specimens gathered over a period of three years, it was found that this preparation was composed of boric acid and sulphate of zinc; 16 per cent sulphate of zinc in this preparation and no alum. Of course, boric acid might be exchanged for borax without much harm, but what as to the sulphate of zinc? Here the physician was using a preparation comparatively innocent of alum and borax. That is, he thought he was using it. As a matter of fact, he was using a preparation that contained 16 per cent sulphate of zinc, a very powerful styptic and astringent, and, in fact a metallic poison. It was recommended to be given in internal doses. Think of using such a powder containing sulphate of zinc without knowing it! We have had much experience to show that these formulas are shifted whenever the manufacturer feels like it. He doesn't seem to care; he does not seem to know that there is any particular harm or danger in it.

Then, there is another class of preparations which are not objectionable *per se*, preparations which the physician really finds of value, of more or less originality. Possibly the manufacturer may be credited with originality, even if he appropri-

ates it from some other country, like a gentleman in New York went over to Germany and found in Leipsic a German patent medicine; now, the German patent medicine is different, as you know, from what it is here. In order to be sold, it must not be of secret composition. I know your experience with the legislature here a couple of weeks ago. I would like to interpolate right here, that in Germany, if you have a medicine and you want to sell it, you will have to submit specimens and the formula to the medical authorities. They examine into it. If they think it is reasonable, if they think it is safe, if they think there might not be any particular harm in the preparation, and it does not contain any potent drugs, they will permit it to be sold. They don't require the formula to be printed upon it, because they know by long experience that the formula does not amount to anything. We ought to know it, too.

Look at Pitcher's Castoria; it has a formula printed on its label, showing the contents, which has never been questioned; yet it is not right. It is said to have pumpkin seed, which they could not put in even if they tried; so that the formula is not at all a true one. It purports to contain also some other ingredients. We are told on the label that Dr. Pitcher used besides pumpkin seed, senna, Rochelle salts, anise seed, peppermint, bi-carb., soda, worm seed, sugar and wintergreen flavor, quite an unwieldy mass. It is true patenting a medicine gives it a prominence and this also gives the formula to the public. Of course, the idea was attractive and they have advertised and pushed its sale vigorously; still any one can make it and let it contain pumpkin seed and all these other ingredients. That is the reason why a receipt is not any longer worthy of a patent; because, according to a decision of the United States Court, whenever an article is made by a patented process and sold under a copyrighted name, the term of the patented process expires immediately upon the expiration of the letters patent; but the trade name remains. It becomes public property so that any one can make castoria; but they cannot call it "Pitcher's Castoria," nor simulate the label or wrapper or make it without having to fight injunctions with the million dollar owner of the present preparation, of course. And that is what I favored for many years in order to regulate patent medicines.

If you will permit me, I desire to say that in order to discuss this subject intelligently, we will have to distinguish between the proprietary medicine and the patent medicine. The medicines which we have been referring to are what we call proprietary medicines, that are sold exclusively or supposed to be sold exclusively, under a physician's prescription. We call the others pat-

ent medicines just to distinguish them. They are not patent medicines. They are all proprietary medicines in law. There is no difference between patent and proprietary medicines, advertised to the laity in the public press and the proprietary medicines that are advertised in the medical journals to the physicians. If you pick up a wholesale price list or catalogue, you will find that after the regular department drugs, chemicals and medicines alphabetically arranged, you come to the department there which contains the proprietary medicines alphabetically arranged, and you will find that Pierce and our good, old friend Lydia Pinkham, Peruna, and the rest of them, are given a place without distinction right alongside of the ethical preparations of St. Louis and New York, which are sold only on physician's prescriptions.

Some gentleman was in Leipsic, Germany, and saw a prescription which was sold in Germany as an iron medicine. He thought it was a good thing. It looked well and tasted pretty good, and he got the right for the United States and Canada for this preparation. But he was pretty foxy. He said, "If I take this over to the United States and want to introduce it to the public as a patent medicine, it will take me many years and lots of money, because there is great competition in that. I believe I will try it on the doctors first. There are not so many medical journals as there are newspapers. Forty or fifty medical journals in the country will just about cover them all, and I will just try the doctor." And he did. The result is what? The doctor bit, because if there is anything that arouses interest in the physicians, or half the physicians, it is a new iron preparation. There is no such rage in fashion, even in millinery, as there is in iron preparations. So, here was a new thing. Here was an iron preparation, an organic compound, which was supposed to be assimilated, because it was not attacked by the H_2S in the intestines. And he pushed it for all it was worth. The result was the doctors prescribed it. But he overreached himself.

You all know about the Porto Rico Commission report. For fear some of you may not have heard of it, I will briefly refer to it, because it indicates the audacity of these gentlemen. As you gentlemen all know, in 1904 a commission from the medical department of the Marine Hospital Service largely was sent down to Porto Rico to study the hook-worm disease. This commission reported in the course of time, describing 5,600 cases. In this report there were a few cases, I think 36 altogether, which had been given this Gude's Peptomangan. It seems when the Commission got down to Porto Rico and began operations, they were pestered to death by the agents

and carloads of samples of this peptomanganat of iron to be tested in this dreadful disease. When the report came out, the proprietor of this medicine got the advance sheets and he took those advance sheets and from them he issued a report which was in every doctor's office in this country long before the government report went out, and from that government's report he had galvanized the report which seemed to show that the only thing that really did any good in this dreadful epidemic was the peptomangate, although he stated that in two cases Blaud's pills had been given instead of peptomangate, but for what reason the report did not state. Now, what was the truth? The truth of it was that in these cases mentioned, 36 out of 5,600 cases, where iron was indicated, they had tried this after a certain number of days without any apparent improvement, and gave Blaud's pills, and they invariably did much more good, and increased the hemoglobin almost 50 per cent. more in the same length of time than did this preparation. And yet this man had the audacity to perpetuate this huge joke, you might say, if it had not been so serious, on the medical profession of this country.

And, then, another thing, when the Journal of the A. M. A. briefly reported that the advance proof of this report showed that this preparation had been used without any good, he wrote a letter to the editor criticising him and said, "You don't seem to know your business. By what right do you allow any of your editors the right to interfere with the interests of your advertisers?" Then immediately the advertisement went out of the Journal. Now, that's a class of preparations which are not objectionable per se. They may not be of the value that they cost in dollars and cents, but the methods, the disreputable methods, which these people employ for the foisting of them on the medical profession are such as should not be tolerated. I think that will give you a fairly good idea as to what the experience of the Council has been. The work is being continued along this line. As soon as analyses are complete and results are obtained, they are published in the journal and furnished, and I hope will be reported more promptly in the future to the State medical journals.

Of course, you realize that there is great opposition to this in certain quarters. There are a great many medical journals published in this country even by medical men, and some by laymen, who have no other interest except the money they can get out of them. Naturally they are opposed to this. They want to get all the ads they possibly can. Of such are the Medical Brief and the Alkaloidal Clinic. They want to take everything that is in sight. Therefore, in order to keep up this movement, it is necessary and very desir-

able to eliminate these privately owned medical journals as far as possible. The State Medical Society should have its own journal in order to be independent, because it does not need to take advertisements of all these patent medicines. I am glad to say that there are now, I think, eighteen or possibly twenty State Medical Societies that have their own Journals. And, when the time comes when every State Medical Society has its own journal, and the A. M. A. Journal is made still more complete, and of still more practical value to the practicing physician, then we will eliminate all these private interests which are simply in the medical journal business for what there is in it, and not for the benefit of the medical profession. Then, these manufacturers of these specialties will not have an opportunity to reach the medical profession, at least, through the journals. They will find it very expensive, and after a while they will probably turn their hands to some other business that will prove more profitable.

There is another fly in the ointment: you may have hard work to get these proprietary medicines made by your druggist, or he may have to supply them from the wholesale houses. Now, I am sure that the regular manufacturing pharmacists and chemists of this country are doing a straight, legitimate business, and generally they are in favor of this project, and their preparations can, as a rule, be relied on. Of course, not invariably. The Council watches those preparations, and intends in the future to still more particularly watch them, just as much as they do these synthetic houses. But, there is the druggist. As you know, everything pertaining to medicine in this country is almost in a formative state. We have not got the methods they have on the continent of Europe. In fact, that is a thing that is *sui generis* to all English-speaking countries. Do you know on the continent of Europe, take Germany, for example, the Kaiser has some distinguished medical man who has devoted his whole life to the study of medical subjects, hygiene, health, and sanitation, and he is set up as the head man in everything pertaining to that, and whenever there is any regulation or law wanted, why he is told, "Now, we want something to regulate this." He formulates it. So the concentrated knowledge existive in the whole empire is represented, perhaps, in this one man; who is there purely for love and for fame, and not for money. The result is that they can issue any regulation they want to, and that is the case more or less in all countries on the continent of Europe wherever the code takes the place of the common law. But, in English-speaking countries, where the genius of a government like ours is that the people themselves determine what they want and

they instruct their legislature, as you do in this great State, then, it is a difficult proposition, because the laymen, of course, know very little about medicine, and that is why every question pertaining to medicine is very difficult to handle in this country. But the wonderful advance that has been made through medical organization, State and National, in this country, even within the last ten years, bids fair to lead us to believe that in another ten years the medical associations and the practicing physician will be much better equipped, much better safe-guarded, than they have been before, and that means also that when the medical graduate goes out, he will be better equipped in medicine, that he will know more about these patent medicines, that he will be able to tell when he sees a fictitious formula, or these preposterous claims. He will, then, be able to say, "That is not right, and I am not going to use it."

For the last twenty years, *materia medica* has not received that attention in the medical schools as it used to. Synthetics have sort of side-tracked it. I believe that the time is soon coming when in many localities the pharmacists will be able to make these preparatons for you just as good as you can buy them from even your large manufacturer. Because he doesn't require a large stock, doesn't require any particular apparatus. Many of them can be made equally as well by him. With the pharmacist's co-operation when he gets to know more about medicine, he, I believe, will assist you, and he is also learning this pure food law, which is already working a revolution

in the drug business. These manufacturers find now that the strong arm of Uncle Sam will catch them as soon as they begin to enforce the act, if they try to sell any adulterated or impure goods.

So, in conclusion, I believe that with the improvement in the practice of pharmacy the physician will be able to get practically all his medicines made largely in his own locality according to these great standard works. We also believe that we have a pharmacopæia beyond compare, and that the medical associations of this country are going to take more interest in the relations of these works; that the State Medical Societies will all send delegates to the Pharmacopæiac Convention in 1910 in Washington, so that they can tell us pharmacists what they want in the Pharmacopæia.

Mr. President, and members, I am indeed thankful to you for your kind consideration of these heterogeneous remarks, and I hope, as I am originally a pharmacist and teacher in pharmacy in Chicago, to see the day that we will establish more cordial relations; that the pharmacists will soon co-operate with the physician, that he will scout patent medicines, that he will refuse to do any counter prescribing, and that the two professions, as we may call them in that respect, will symbolize the old idea where Esculapius, the virile, muscular old gentleman with the big club, will sit alongside of the coy maiden Hygeia while she is pressing the serpent's fangs and collecting the poison which, when properly administered by skill and care, will not kill but save life. (Applause.)

THE JOURNAL

OF THE

Arkansas Medical Society

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Edited by

MORGAN SMITH, M. D.

Secretary Arkansas Medical Society

108 Louisiana Street, Little Rock, to whom all business communications should be addressed.

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the State, changes of location, etc., are requested.

REMITTANCES.

Remittances should be made by check, draft, registered letter, money or express. Currency should not be sent, unless registered. Stamps in amounts under one dollar are acceptable.

ADVERTISING RATES.

A schedule of rates will be furnished upon application.

ADVERTISEMENTS.

Advertisements should be received by the 8th of the month to insure their insertion in the current issue.

CHANGE OF ADDRESS.

Change of address will be made if the old as well as the new address be given.

CONTRIBUTIONS TYPEWRITTEN.

In order to lessen liability of errors, contributions should be typewritten.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

This issue contains the Official minutes of the House of Delegates and General Sessions of the Arkansas Medical Society, held at Little Rock, May 14-16, 1907.

PRESIDENT DRENNEN'S ADDRESS

The annual address of the President is always listened to with more than ordinary interest for the reason that it is supposed to deal with questions of vital concern to the profession, and this presumption was realized in the dignified and forceful address of Dr. Drennen, delivered on the morning of the first day of the General Meeting. Amongst the many subjects of interest touched upon, perhaps the one of most

concern just at present, was his plea for the enactment by the next Legislature of a law similar to the one recently passed by California. Such a law would forever put at rest the biennial attempts of the adherents of "pan-pathies" to influence legislation in the way of securing special privileges and avoiding the legitimate requirements exacted of the regular profession. But in view of the recent spectacle of the Prince of Charlatans addressing the Arkansas Legislature by invitation of one of its most prominent but gullible members, the conclusion is not warranted that such a happy event as the passage of such a wholesome law as referred to can be looked for in the near future.

There appears to be much truth in the statement made that the failure to secure needed medical legislation is due to the adverse influence of the undergraduates. There are nearly four thousand legalized practitioners of medicine in this state, and less than one-third of this number belongs to the county societies. With this large majority of medical men arraigned against any movement inaugurated by the regular profession looking toward lessening the evils which afflict the public as well as the profession to which they belong, it can be seen what a strong factor must be reckoned with before uniform and concentrated effort can be accomplished. Dr. Drennen unqualifiedly favored the admission of the undergraduate as a solution of the problem. The wisdom of this suggestion is yet held *sub judice*.

Dr. Drennen's scathing denunciation of the administration of the Federal Government at Hot Springs, was a matter of some surprise, inasmuch as the charges adduced were not generally known. In fact, the belief has been rather widely held that the Government and the local profession were working in perfect harmony, and that perfect satisfaction prevailed. The charge of favoritism in the distribution of privileges resident in the Government, is openly charged, one of the results of which has been the building up of gigantic private enterprises to the great disadvantage of the mass of the resident population. He charges that, "The sick and invalid class who find their way to this blessed health resort, are not receiving,

with possibly the exception of the inmates of the Army and Navy Hospital, at the hands of the Government, one-half the consideration which the horses of Mr. Roosevelt's own stable receive. So far as the respectable members of the medical profession are concerned, not the sorriest dog in the poorest kennel in Arkansas, is less noticed than they." In order that present and future abuses may be corrected and prevented, he appointed a committee whose duty it is to invoke the aid of the American Medical Association and the National Legislative Council in making an appeal to the President of the United States to appoint a Commission to make a thorough investigation of the conditions now prevailing there, to the end that true and unbiased representations may be submitted to the Secretary of the Interior for his information.

The address will take its place amongst the most valuable papers of the society, and its close and earnest perusal is recommended.

THE NEW PRESIDENT OF THE ARKANSAS MEDICAL SOCIETY.

Dr C. C. Stephenson, the newly elected President, is, perhaps, one of the most widely known men in the State, his affiliation with the Society dating back early after his graduation. The earnestness which he has always exhibited in the affairs of local, state, and national medical organization, made him the natural choice of the Society for secretary at the Texarkana meeting in 1904. During his tenure, he has brought a rare executive ability to the office, and his administration has been eminently satisfactory and highly commendable. He came into office just after the adoption of the new Constitution and By-Laws, and many vexatious questions that naturally arose as a result of the change had to be solved, and the present satisfactory and uniform system by which the duties of the officers of component societies and the secretaries are performed, attests to his matured judgment and skillful efforts in that direction.

Combined with the duties of Secretary are those of editor, and the converting of the Bulletin into the present Journal, a representative

state organ, was accomplished under his direction. To bring into one compact organization all the physicians of this State; to promote harmony and a brotherly feeling amongst them; to raise the standard of medical education and to uphold the policies of the parent organization, the American Medical Association, have been some of the important subjects which have received his strong editorial endorsements.

Dr. Stephenson is forty-four years old; a Mississippian by birth; a graduate of the Kentucky School of Medicine, '89. On account of ill health, he was forced to discontinue general practice, and after thorough preparation, opened an office in this city in 1899 for the practice of his specialty, Diseases of the Eye, Ear, Nose and Throat. He is Professor of Ophthalmology and Otology, College of Physicians and Surgeons, Little Rock. Dr. Stephenson's character is intensely religious, and he practices in his daily life the principles of his church. He is also a zealous Mason, holding membership in the Albert Pike Consistory and the Ancient and Arabic Order of the Mystic Shrine.

The strongest element in Dr. Stephenson's character, is the intense earnestness with which he does things, and this rare virtue, coupled with his acknowledged ability as a medical man, as well as a leader of men and thought, presages for him and the Society a most auspicious administration.

The Arkansas Medical Society has conferred an honor upon one who, it is earnestly believed, will reflect credit upon the office to which he is chosen, and give to it the great dignity to which it is entitled.

THE LITTLE ROCK MEETING.

The thirty-third annual meeting of the Arkansas Medical Society was held in Little Rock, May 14-16, the registration being the largest in the history of the organization. This unusually large attendance was not unlooked for, inasmuch as the itinerary through the state a few weeks prior to the meeting of Dr. J. N. McCormack, National Organizer of the American Medical Association, was expected to show fruits of his earnest efforts.

The Hotel Marion, the beautiful hostelry recently completed and thrown open to the public, was fairly able to entertain all who applied for accommodation, although many visitors sought shelter elsewhere at other hotels. The sessions of the House of Delegates and the General Meetings were held in the banquet hall of the Marion.

The Delegates began to arrive Monday evening, and when the House of Delegates was called to order on Tuesday morning at ten o'clock, a quorum was present, and the transaction of business was begun with an earnestness and despatch that have rarely characterized previous meetings. The adoption of a new Constitution and By-Laws was the most important business transacted. A very animated discussion was engaged in on the motion to admit undergraduates to membership. The motion was defeated by a safe majority, but there seemed to be such a diversity of sentiment, or at least such a state of uncrystallized opinion, that the question can not be said to be settled, and the next meeting will no doubt furnish an opportunity for the exhibition of additional oratory on the subject. On account of the adoption of the new Constitution, all offices were declared vacant, and the Nominating Committee was so instructed by the Council. The Council had nothing but routine work before it, which is indicative of harmony amongst the membership of component societies.

A doubt perhaps is felt that the sectional work was quite up to the standard set by previous meetings, although the number of papers read was about the same. The Section on Obstetrics and Gynecology, had only one paper read before it, the Section on Diseases of Children suffering the same indignity. There were many papers of individual worth, strong and original in thought, that compensated in some respect for the manifest indifference shown in other sections.

A most pleasant feature of the meeting was the presence of several distinguished guests, notably amongst them being Dr. John H. Wyeth, of New York, and Dr. Fenton B. Turck, of Chicago, both of whom contributed a valuable paper, the former to the Section on State

Medicine and Public Hygiene, and the latter to the Section on Medicine.

The social features were all that could be desired, and the local Committee on Entertainment exhausted every resource to anticipate the pleasure of the visitors. On Wednesday evening a special vaudeville show was put on at Forrest Park, which was well attended. A reception in honor of Dr. Wyeth was given by Dr. Shinault, at his beautiful home on East Fifth street, on Thursday evening, which was largely attended. The entertainment of the visiting ladies was in charge of Mrs. Edwin Bentley, and included a Tea at the Country Club, trolley and automobile rides over the city to points of interest. The crowning social event occurred on Friday evening when the Little Rock Board of Trade as host, entertained at a banquet at the Marion Hotel. The flow of oratory and feast of the stomach was presided over by Hon. Robt. E. Wait, President of the Board of Trade, whose interspersed witticisms were highly enjoyed. Hon. George W. Rogers, of the Little Rock Board of Trade, was the first speaker, and responded to the toast, "Welcome." The toasts and speakers were as follows:

"Hosts and Guests" (Pous frais faits), Dr. Anderson Watkins, Little Rock; "Money and Mosquitoes," Dr. Joseph P. Runyan, Little Rock; "The Song of My Saddle Bags in the 50's," Dr. A. A. Hornor, Helena; "Medical Heresies, Heretics and Heterodoxy," Dr. Frank Vinsonhaler, Little Rock; "The Windy City, Gas and Gastronomics," Dr. Fenton B. Turck, Chicago; "Reminiscences Ad Libitum," Dr. John A. Weyth, New York; "The Profession of Fraud," Dr. H. H. Rightor, Helena; "Flotsam and Jetsam," Dr. W. F. Smith, Hartford; "Dum Vivimus Vivamus," Dr. Mat S. Dibrell, Van Buren; "The Precession of Little Rock," Dr. L. P. Gibson, Little Rock; "*Prend moi tel que je suis*" (Help Wanted), President-elect, Dr. C. C. Stephenson, Little Rock; "Post-Mortem Remarks," President Drennen, Hot Springs.

With the informal dismissal of the banqueters, passed into history the thirty-third annual meeting of the Arkansas Medical Society, in many respect superior to all previous ones; in

some, inferior; but as a whole, it will serve as a standard for the future.

THE ATLANTIC CITY MEETING OF THE AMERICAN MEDICAL ASSO- CIATION.

The fifty-eighth annual session of the American Medical Association, though not as large in point of attendance as the Boston meeting, was highly representative of the thirty thousand physicians who compose the greatest medical organization in the world. The meeting was presided over by the distinguished New York surgeon, author and scholarly gentleman, Dr. Joseph D. Bryant, and his rulings were characterized by a most gracious spirit of fairness and equanimity. Taking cognizance of the many strange and ominously rumbling noises, underground be it happily said, which have been heard for the last few years concerning the official readings on the financial seismograph at the Dearborn Observatory, Dr. Geo. H. Simmons, Director, the gratitude of the profession is due him for the free swing and indulgence given those who doubted the reliability of the instrument, and the hope is entertained that the threshing which this question received, will suffice for a decade. A greater president than Dr. Bryant has not filled the chair.

Apropos of the charges of irregularity in the management of the business and other affairs of the Association, it is refreshing to know that the fullest confidence in the honesty, integrity and good faith of the General Secretary as well as the Board of Trustees, was voted them by the House of Delegates, even those precipitating the attack heartily joined in the unanimous expression of thanks. Dr. Simmons, his immediate associates and co-laborers emerge from this onslaught on character and motive with honor, and clean hands, and may reciprocal confidence and good faith exist between them and the profession for all future time.

Many foreigners of international reputation were in attendance, including Kocher, of Berne; Cushny, of London; Killian, of Friburg, and Gluck, of Berlin, all of whom were elected to honorary membership.

President Mayo organized the House of Delegates and delivered his farewell address. Then followed the reports of the General Secretary, Board of Trustees, Special and Standing Committees. The report of the Secretary contained many items of interest and should be read by every member of the Arkansas Medical Society. The total membership of the Association is reported to be 27,215, on May 1, a gain of 3,879, over the previous year.

The Board of Trustees detailed the assets over all liabilities to be \$269,661.89. The establishment of a sinking fund of not less than \$150,000, was advised as necessary to put the association on a sound financial basis.

The reports of the Special and Standing Committees are exceedingly interesting, and contain the very "meat" of the proceedings.

The scientific work of the Sections included the discussion of many subjects of keen interest at present, notably, exophthalmic goitre, in the Section on Practice of Medicine, Professor Kocher, of Berne, discussing the surgical treatment; articular rheumatism, in the Section on Pharmacology and Therapeutics; ileus, in the Section on Surgery; and pure milk, tuberculosis and family hygiene, in the Section on Hygiene and Sanitary Science. The Section on Ophthalmology was the most largely attended of all the Sections, over five hundred being in attendance.

The following officers were elected:

President, Dr. Herbert L. Burrell, Boston; first vice president, Dr. Edwin Walker, Evansville, Ind.; second vice president, Dr. Hiram R. Burton, Lewes, Del.; third vice president, Dr. Geo. W. Crile, Cleveland, Ohio; fourth vice president, Dr. W. Blair Stewart, Atlantic City, N. J.; secretary, Dr. Geo. H. Simmons, Chicago; treasurer, Dr. Frank Billings, Chicago.

Dr. Herbert Leslie Burrell, the president-elect, was born in Boston, April 27, 1856, and graduated from the Medical Department of Harvard University, in 1879. He is Professor of Clinical Surgery in Harvard University, and a member of many scientific bodies. He is an educator of high rank, possesses a charming personality, is a forceful speaker and

debater, and under his guardianship, the American Medical Association should become yet stronger in unity and power.

CONCERNING THE JOURNAL

The Journal is the official organ of the Arkansas Medical Society; its editor, a servant. To honestly, assiduously and satisfactorily discharge the duties and obligations which its editorship entails, will be the constant endeavor of the new management. To maintain, amplify and vigorously defend the high standard of ethics, medical thought and refined professional sentiment for which the Arkansas profession stands, is a course which cannot but meet the universal endorsement and approbation of its readers, and the burden of the Journal will be to realize this consummation. To exploit a personal policy, if one were even possessed, would be a manifest violation of the propriety of position and a usurpation not to be countenanced. But a certain latitude of thought and expression may rightfully be claimed as belonging to the prerogatives of the office of editor, and will be freely indulged in whenever the subject or occasion justifies it, always keeping in mind, however, the ultimate good and enlightenment of the profession. Unauthorized authority will not be assumed either in conducting the affairs of the Journal or discharging the duties of the Secretary's office, and the written law and acknowledged precedent will serve as the criterion of action and conduct. Should, mayhap, at some time there be exercised a certain individuality not consistent with the spirit of the law, or a wholesome policy, it should not be mistaken for captiousness, which is littleness; nor for officiousness, which is grossly reprehensible in a servant.

The Journal should possess length, breadth and thickness, and be made thoroughly representative; loved and admired at home for its

excellent qualities and character, it cannot fail to be respected and honored abroad. Mutual co-operation, friendly criticism and advice from those who feel an interest in the welfare of the Society and have faith in the power of organized medicine will be welcomed.

The differential diagnosis of the different forms of dysentery is best made by collecting from patients, as Boston states, the rectal mucus which, as he further says, is the most likely to contain the ameba. I will state that his method of collecting specimen for examination by introducing the rectal tube or catheter is a good one, as I have found from experience. It consists of a rubber catheter with several openings made in it; this catheter is immersed in hot water for a time, then taken and passed into the rectum for a distance of several inches—three to six, he states—I sometimes pass it higher. The mucus, blood or pus that clings to the catheter, upon withdrawing it, is likely to contain the ameba. I have the patient, if it be a chronic one of the disease, come to my office, otherwise I carry my microscope to the patient's home, and there examine the fresh specimen placed upon a warm slide; placing a drop or two of distilled water with the particle on the slide and covering with cover glass. I have had no experience with the stained specimen in this disease. The ameba, when seen on the slide, is as before stated, from four to eight times as large as a red blood cell. It will, if observed closely for a short period of time, be noticed that the pseudopod formation occurs, and here is the chief point of differentiation between the ameba and the epitheloid cells which are often present in the specimen when taken direct from the patient. These cells display a violent protoplasmic motion, but true pseudopods are not formed.—*McClendon, Marianna, in a paper read before the Tri-State Medical Association, Memphis, 1906.*

Official Minutes of the Arkansas Medical Society

Held at Little Rock, May 14-16, 1907.

MINUTES OF THE GENERAL MEETING.

First Day—Morning Session, Wednesday,
May 15, 1907.

The meeting was called to order by President Drennen, of Hot Springs, at 11 o'clock, a. m., in the Banquet Hall of the Hotel Marion.

The beautiful Hall, especially arranged for the occasion, was filled to overflowing by the visiting doctors, their wives and daughters, and laymen, who had congregated to witness the opening exercises. Seated about the President, were Hon. Morris M. Cohn, Acting Mayor, Rev. Dr. Andrews, the Vice-Presidents, members of the Council, Dr. Chas. R. Shinault, Chairman of the Arrangement Committee, Dr. Anderson Watkins, President of the Pulaski County Medical Society and representatives of the press.

President Drennen called the meeting to order and invited Rev. Dr. Andrews to invoke Divine blessings, who spoke as follows:

Our Heavenly Father, we thank Thee for the revelation of Thyself, the Infinite and Eternal; we thank Thee for Christ Jesus Thy Son; we thank Thee that Christ hath said unto the world, "Greater things than these shall I do, because I go unto the Father." Until God, the Creator, in Christ, becomes God, the inspired; until all the possibilities of manhood are uplifted and uncapped and God hath shown the high destinies of His people, we pray for the world wide movement that our nation has carried. We pray Thee for the arts and sciences of the world, and Thy blessings upon the great healing art and Thy servants the high priests in the sacred temple of healing; that Thy Grace may rest upon the medical fraternity in its world-wide relationship. Let thy blessings rest upon this organization and upon Thy servant, the President, and all with him in authority. We pray Thy blessings upon these splendid men. We thank God for the medical fraternity of our State; for the type of their manhood; for the character of their art; for the breadth of their intellect; for the depth of their unselfishness and for the high standard in all the departments of life set by these splendid men. We pray that the Infinite and Eternal God may bend in tenderness over these men in their convention now assembled. Our Father, care for any of their patients who may

be sick in the absence of the family physician; care for their loved ones; let Thy angels fly from their watch towers about their homes by night and stand guard while the loved ones sleep. We pray God's blessings upon all of their interests. May Heaven's softest and tenderest influences abide with and care for them. And, now, Our Father, let Thy blessings rest upon these, Thy servants, the doctors here assembled. We thank God for the family physician; we thank God for these men who stand between us and death; we thank God that when the Death Angel comes to our homes, that here are the men who fight him away; and the sun is never too hot, nor the night too cold and dark, and the storm is never too fierce for these unselfish servants of humanity to go forth and fight the Death Angels away from the homes of the people by night while the world is asleep, studying that they may know the great truths; and we thank God that none of the professions have so advanced, and art and science have nowhere been crowned with such rich grace and heavenly abundance as in this great department of science. God bless them and this assembly, and let Thy sweetest influence rest with these Thy splendid servants. We ask it for Christ's sake, Amen.

Dr. Drennen: I am informed that the mayor of the city is unable to be with us this morning. He has, however, a gentleman here in his stead who is worthy of his shoes. I take pleasure in introducing to you Judge Morris M. Cohen, acting mayor at the present time, who will address you. (Prolonged applause.)

ADDRESS OF ACTING MAYOR COHN.

Mr. President, Members of the Arkansas Medical Society, Ladies and Gentlemen:

As has been stated to you by Dr. Drennen, I am here in behalf of the mayor of the city of Little Rock to administer to you the first dose on this occasion. In behalf of the people of Little Rock, in the name and stead of the mayor and the City Council of our city, and, as it is the capital city of the State, your city, I bid you a joyous welcome here today. (Applause.)

The pages of written history teem with the deeds of great generals, and we would but reluctantly read the pages of any history that did not teem with the valorous deeds of that country's generals and its armies. We delight to look back upon and celebrate such characters in history as

Alexander, Hannibal, Caesar, Napoleon, Grant, Lee, Johnson, Farragut, Semmes and Dewey. We delight in the thought of martial strength; we all rush gladly to see the passing regiment as it goes down toward war and carnage. Yes, for some strange reason or other, we are attracted to that part of life that deals with desolation and destruction, misery and woe, carnage and death, whether it affects men, women or children; but what shall be said for the mission of those who in their quiet, unobtrusive way from the medicine man of the savage tribe to the modern scientific doctor, have saved human lives and peopled the world with more lives saved than were slaughtered in the great battles between the armies of mankind? What shall be said for those whose mission it has been to quietly save and lengthen life and assuage pain? History does not tell us very much about it. You would have some difficulty in finding any mention made of it in the earlier histories, and modern ones are woefully silent upon this subject. This is a very remarkable state of affairs, and we are all bound to confess that we would speak for those who are not doctors, would rather not have the doctor around anyhow; but when we do need him, he is the most welcome person on the face of the earth. (Laughter and applause.) Why, he radiates sunshine in the clouded household.

I need not repeat what Dr. Andrews has said. He has stated it correctly, that their's is a mission of unselfishness and patriotism; all in the quiet without any ostentation or parade. When we need him, we need him worse than any other person in the world! This, while it is not, an occasion upon which we call upon the doctor for his immediate services, is an occasion when doctors are assembled to consider matters that shall redound to the future benefit of mankind. So we gladly welcome you to the city of Little Rock today. We are happy that you are here. We hope that your deliberations will be attended with the same satisfactory results with which your past deliberations have been characterized; and that one way or another you will discover new means whereby pain and suffering will be done away with and life will be lengthened and human happiness increased.

Speaking, then, in behalf of the mayor and the people of the city of Little Rock, I may say that we are most happy to have you with us. We hope you will stay long, and when you go away you will soon come back again. (Applause.) I am told that the latch string is on the outside at every home in Little Rock in your behalf. (Applause.) If I am mistaken about that; if anybody should refuse you admission, just report him to the mayor or, in his absence, to me, and I will have his head cut off. (Laughter and applause.)

There are several banks in town. If you get

short, gentlemen, just go over and help yourselves. (Applause.)

I trust that you will enjoy this visit to the city, and that it will be so pleasant to you that you will be anxious to come again, and come frequently. I thank you, gentlemen, for your attendance today. I hope that it will continue all the year. (Prolonged applause.)

President Drennen: Gentlemen of the Arkansas Medical Society, I take great pleasure in introducing Dr. Anderson Watkins, President of the Pulaski County Medical Society, who wishes to extend to you a welcome on behalf of the local profession.

ADDRESS OF WELCOME.

To the Arkansas Medical Society by Anderson Watkins, M. D., President of the Pulaski County Medical Society.

Mr. President and Members of the Arkansas Medical Society:

We are upon the threshold of one more annual gathering of the clans, and Pulaski County extends you the most cordial welcome. It is a source of gratification and pride to us that we in this county are banded to form one of the units of such an organization as the State Society, one which upholds the faith, and whose purpose it is to lift men up from mere monetary features to the more lofty heights of science and humanity. It is upon these occasions, gentlemen, that we can forget the petty strifes and bickerings of our daily routine and call to mind once more the fact of our brotherhood in a profession which partakes of altruism in its high purposes. The fact of our humanity necessitates many failures and backslidings from the lofty doctrines of medicine; but such imperfections neither detract from the truth of a pure faith nor its value in practical results.

This body includes not only the specialist and internist from the cities with their accessible modern appliances, but also the country doctor, the man who has to do everything in his profession and many things which are extraneous to its ordinary demands. He often has grave and sudden emergencies to meet alone and unaided, emergencies which involve human lives, and upon his quickness and his soundness of judgment all depends. And, gentlemen, to the honor of the profession and the glory of man, he seldom fails in response. It seems to me that organized medicine is especially valuable to the country doctor, for he can not attend a three days' session of our Society without benefit from the interchange of ideas and experience which occurs at each meeting; he is re-invigorated for his daily struggle with disease and ignorance, and he feels around him the mantle of brotherhood and protection

bestowed by the parent organization. On the other hand we from the cities must not believe that all the good of our annual session is bestowed upon our brethren from the country; far be it from me to make such an assertion. Do we not reap a harvest of knowledge and courage when we listen to the brave story of the man whose work is amidst the people of an entire community, whose territory is embraced in counties, who rides by day and by night, who is internist, surgeon, obstetrician, specialist, all in one; who heals the sick, ushers the babe into the world, watches by the death-bed and consoles the bereft? Shall we not honor him for his courage; admire his practical wisdom? He does great things with half of what we require for our daily work. There grows in him the talent for improvisation, simplicity of technique, the ultramontaine of practical medicine is his.

But there are many of us in the city who labor under conditions, disheartening in the extreme, struggling under odds, handicapped by the necessity for a livelihood, not only for ourselves but for those who are dependent upon us, and harassed by the petty rivalries, which tend to the undoing of our profession. We confront an ignorance of health on the part of the laity, which is a hundred-fold more dangerous than in the country. By reason of greater materials, its effects are so much more dangerous in the more densely populated centers. The contamination of the water supply of a city may produce hundreds of typhoid cases. The close intermingling of the tuberculosis and the non-infected, if accompanied by carelessness in hygiene, may give rise to other uncounted cases. And last but not least we have to fight the various "pathies," "isms" and remedies, originated by frauds and fostered by the illogical hysterical mind, which prevails to an alarming extent in our people.

It is by the personnel of the County Societies that the most effective work against the prejudices and ignorance of the laity must be accomplished. As an organization the State Society is not very effective in health legislation. This fact has been plainly demonstrated time and again, most impressively in our recent skirmish with the legislature against the patent medicine business. We were woefully defeated because the legislature seemed totally unprepared to consider the selfishness of the stand taken by the medical profession. Upon our side the fight was made by our Legislative Committee, who did their whole duty, with a few individual members, re-inforced by a formal request upon the part of the Society for the passage of the Patterson-Black bill and aided by desultory and scattered action in different portions of the State. The opponents of the bill were the druggists, who out-number us in votes and who used not only their own influence, but also

the "pull" and names of a multitude of lay-friends, and were backed by a patent medicine manufacturers' lobby of considerable strength. The legislators could only compare the number of votes for and against the bill, and were unable to distinguish the difference between might and right. We may well ask why a legislative body could not see the value of a measure so beneficial in its purpose. The answer is plain, the legislature represents the people and the people are yet far from comprehending public health and sanitation or the unselfish attitude of medical men who strive for the betterment of existing conditions.

What other profession or business aside from the clergy would actually try to lessen the market for their commodity? What other is daily increasing the world's available supply on the one hand and lessening the demand on the other? From the standpoint of business, the sacred fetish of civilized people, such efforts are the height of folly. To the average lay mind the medical profession is a very lucrative one of high fees and small labor, the main purpose of which is to get money. To the public it is inconceivable that men whose business it is to treat the sick, should, by proper health legislation, wish to reduce the number of sick. Behind every measure for the improvement of the public health, many persons seek for an ulterior motive, or as commonly put, for "the colored gentlemen in the wood-pile." The one remedy for such a state of affairs is education, education of the laity by the members of this Society in their daily contact with people in their own communities. Herein lies the value of the County Society, its members are thrown in touch with individuals and it is by personal persuasion and arguments that such work as we have mentioned can be done. The sum total of the work of the individual members represents the value of the County Society, and the aggregate of the County Societies sums up with that of the State organization. We will not get effective laws regulating the practice of medicine or controlling the patent-medicine evil or furnishing accurate statistical reports of disease, deaths and births until the people through their representatives are ready for them.

We are here as guests of an organization, which stands for advancement and hospitality; the members of the Board of Trade are our hosts for this occasion, and from their well known capacity for entertainment, we may feel assured that we shall be treated royally. To these gentlemen are due our thanks and when this session is concluded, I know that the Board of Trade will have proved most charming hosts.

Such gatherings as we have today offer encouragement not only for the advancement of individual knowledge in the State but also for greater

unity of the profession in matters concerning its own and the public good. To you, gentlemen, who have come from afar we extend our special thanks because, at personal loss and inconvenience, you are testifying to your interest and devotion to your profession. We who are at home shall feel stimulated by your presence and believe me, we are. The heartiest of welcomes, the best of good fellowship and most earnest co-operation are for you. Gentlemen, we of Pulaski County, throw open our doors to bid you enter as honored and beloved guests.

Dr. Drennen: In his own way, Dr. H. H. Canfield, of Siloam Springs, will now address you in response to the addresses of welcome from the city of Little Rock and the members of the Pulaski County Medical Society.

RESPONSE OF DR. H. H. CANFIELD.

It has been said, and repeated so often that the saying has become one of the truisms of our language, that the sweetest word in any tongue is MOTHER. Far be it from me to wish to detract in any way from the precious sacredness of that word, or to rob it of one ray of the heavenly halo that surrounds it. But is not that sacredness and that halo due largely if not entirely to the fact that no matter how wilful or how wayward the boy or girl may have been, there still lingers in the mother heart a longnig sympathy for the erring child, who knows that though the whole world beside may turn the deaf ear and the cold shoulder of scorn, there is yet left in the mother's arms and on the breast that nursed him into being a heart-felt WELCOME?

And so this WELCOME to which we have listened comes to us today after our year's separation as an especially precious thing, and to carry the analogy still further it is, like the welcome of our mother, precious because we feel that it is sincere. We are come among you for the laudable purpose of renewing old friendships, of mingling our thoughts and experiences, of developing the esprit de corps that arises in a united effort to one end. And that purpose is a laudable one because all our exchange of thought, all our efforts at organization, are that we may better serve our noble profession in its holy mission to suffering humanity.

You knew our mission when you invited us to make this our place of meeting, you knew it when you bade us this repeated and hearty welcome. And as we do not regret our coming, so we are determined that you shall not regret your invitation and welcome. We intend to work so worthily, stay so long and eat so heartily that your caterers and merchants, glad that we came, shall be sorry when we leave. My only anxiety is lest your com-

mittee on entertainment may be twice glad to see us go, and your Board of Trade to trade us for anything.

But while we feel that, as the guardians of the public health and devoted servants of the whole people we had a right to expect a welcome, we do not underrate the privilege accorded us by your fair city. As the capital of our commonwealth she belongs to all of us, but not so the homes that have so thoughtfully provided for our enjoyment. We count it a great favor to have the keys to your hearts and homes and city handed us so unreservedly, and I should be derelict in my duty did I fail to return you the thanks of every visiting doctor, wife and sweetheart, whose mouthpiece it is my privilege to be. And when all these meetings shall be merged into that one great meeting that awaits all good doctors and their friends, methinks the one word that will most gladden our hearts on our arrival at that city of joy and peace will still be as it is here this blessed word WELCOME.

When we shall reach that mystic creek
That flows along the shores of time;
And no more words remain to speak,
And no more thoughts to put in rhyme.
When we shall hear the summons sweet,
Which calls us to that heavenly flock;
Our last fond wish will be to meet
The friends we met in Little Rock.

President Drennen: Dr. Shinault, Chairman of the Committee on Arrangements and Program, wishes to make some announcements.

Mr. President, Ladies and Gentlemen: I wish to announce that there will be at Forrest Park this evening a play with special features complimentary to the doctors and their families, doctors wearing badges would only pay half fare. I hope they will all attend and have a good time. There will be nothing in the way of liquid refreshments stronger than lemonade, circus variety, however, but there will be plenty of this brand. Physicians carrying private flasks as a necessary precaution against snake bites, will not be too closely scrutinized on entrance, provided they can show satisfactory evidence that they are not in the Trust.

Besides the vaudeville, there will be other attractions, such as shooting the shoots, looping the loop and bumping the stumps. You can also have your fortune told through a phonograph, which is said to be more reliable, and at the same sitting the chiropodist, with his mag-

netic touch, will give you a sample of his specialty, which will guarantee you solid comfort during the remainder of the time you will be with us.

The credit for this most excellent program is largely due to the doctors' wives and daughters of the Pulaski County Medical Society, and permit me to say, it is a rare thing you have a "corn doctor" furnished you on such occasions.

The program for each day will be announced at the morning session of the General Meeting.

Vice-President St. Cloud Cooper assumed the chair and introduced President Drennen, who delivered his address.

On motion the general meeting adjourned until 2 o'clock in the afternoon.

First Day—Afternoon Session.

The meeting met at two o'clock p. m., Dr. St. Cloud Cooper, of Fort Smith, First Vice-President, in the chair.

The Reference Committee on the President's Address appointed by the chair is composed of Dr. G. A. Warren, of Black Rock; Dr. J. B. Bolton, of Eureka Springs; and Dr. W. S. Stewart, of Pine Bluff.

Vice-President Cooper gave a resume of the work that had been done by the House of Delegates. Over three hundred members had already registered. All of the Committees have been appointed and had gone to work. The Committee on Privileged Communications has under consideration a complaint made by Dr. L. P. Gibson, of Little Rock, in which he calls attention to a violation of the law on the part of Gov. Davis when he went outside the list of names recommended by this Society for appointment on the State Board of Medical Examiners. A vacancy occurred by the resignation of Dr. Runyan, and the Governor appointed Dr. Love, of Dardanelle, whose name had never been certified. (See report of Committee on Privileged Communications).

The most important business thus far transacted by the House of Delegates, was the adoption of the new Constitution and By-Laws. There were but few changes made, and the motion to admit undergraduates was not adopted. On account of the adoption of the new Constitution and By-Laws, it will be necessary to elect new

officers, and the Nominating Committee has been so instructed.

Dr. C. N. S. Hallberg, a distinguished member of the Council on Pharmacy and Chemistry, of the American Medical Association, was present, and there being no objection, the privilege of the floor was granted him.

Dr. Hallberg delivered a very interesting address which was listened to with the closest attention, and received enthusiastic applause. (See address elsewhere). A vote of thanks was tendered him.

INVITATION FROM THE LITTLE ROCK BOARD OF TRADE.

The Secretary read the following communication from Mr. Robt. E. Wait, President of the Little Rock Board of Trade, which was referred to the Nominating Committee:

Dear Doctor:—On behalf of the Board of Trade, in particular, and the citizens of Little Rock generally, I desire to herewith extend to the State Medical Society a most cordial invitation to hold its 1908 Convention in the city of Little Rock, assuring you of our pleasure to have you with us during the present meeting. You may rest assured that we will do everything possible to contribute to the success of the meeting, and will be very glad indeed to meet with you and your associates at any time looking to complying with any requirements that may be regarded as essential to secure your acceptance for next year. The central location of Little Rock, its numerous attractions, hotel accommodations, etc., are strong cards in its favor. Wishing you a most pleasant and profitable meeting, and extending a most cordial welcome, I remain,

Yours truly,

ROBT. E. WAIT,
President Board of Trade.

As Chairman of the Board of Trade Entertainment Committee I want to impress on you the assurance of a sincere desire that your society honor Little Rock again next year by meeting in our city. Our Committee will be more than pleased to meet with you at any time and arrange details of the next year meeting. With best wishes.

Yours,

GEO. W. ROGERS,
Chairman Entertainment Committee.

Attest:

GEO. R. BROWN, Secretary.

Mrs. Bernie Babcock, Editor of the Sketch

Book, was introduced by the chair, and spoke as follows:

Mr. President, and Gentlemen of the Arkansas Medical Society:

When I was a very young girl, two classes of men appealed to my imagination as the kind hero worshipers put on pedestals. One was the man who wears a blue coat with brass buttons and who signals his engineer like this (indicating) and starts a train; who hops on when it is running and who has authority to put a man off in the woods if his fare is not forthcoming. The other man was he who can come into a room where friends with pale cheeks and weeping eyes are gathered around the bedside of some loved one, and who, by the magic of the administration of a few pills, a bit of powder or a dose of something from a bottle, turns the fever away and changes the tears into smiles. Quite early I made up my mind I would be such a man. Being a girl the situation presented insurmountable difficulties. But the family physician said I might be a lady doctor. This was next best, and this I determined to be. The open arms of glory and renown coaxed me on but before them came a man, a very handsome and lovable man, who offered as substitute for the arms of glory and renown a certain pair of arms which he possessed. (Laughter and applause.) The substitute was accepted, and then, instead of a career, there came a kindergarten and children to take care of. The training of these babies was, however, good experience; for after the wheel of Fate had turned the bride's veil into the widow's weeds, and had thrown me into the arena of the breadwinner, I found myself with a baby magazine on my hands. A baby magazine is nothing uncommon. They are born at a rate that would please the President even in his gloomiest contemplations of race suicide. Plenty of them have been born in Arkansas. But the mortality among infants of this kind has been so great that the death list in this State includes them all except the Sketch Book which celebrates its first birthday with its next issue. I am not afraid this baby will die of appendicitis, tonsillitis, gastritis, peritonitis or any other of the "itises," but I am afraid of marasmus. To prevent this wasting disease, I want you all to help me. An ounce of prevention is worth more than a ton of strychnine, hypodermics or salt water transfusions. If my baby gets to the place where these measures are necessary, much as I know the last one of you would like to take a hand in administering the dose, and heathenish and unmotherly as it may seem, I intend to kill the poor little youngster. The ounce of prevention this baby needs to prevent any such dire ending is plenty of nourishment in the way of subscriptions at one dollar per year. I hope you will stam-

pede and gather around me like bees around white clover at the close of this session and provide this nourishment.

I thank you, gentlemen for the courteous hearing you have given me, and for your interest.

On motion the meeting was adjourned.

HOUSE OF DELEGATES.

The House of Delegates convened in the Banquet Hall of the Marion Hotel, and was called to order by the President, Dr. C. Travis Drennen, of Hot Springs, at 11 o'clock, a. m.

After the registration of Delegates, the first order of business was the reading of the report of the Secretary. On motion of Dr. A. A. Horner, of Helena, the report was referred to the Auditing Committee.

REPORT OF THE SECRETARY.

To the House of Delegates:

In compliance with Section 4, Chapter 6, of the By-Laws of the Arkansas Medical Society, that defines the duties of the Secretary, I beg leave to submit to you this, my third annual report, embodying as it does, the official acts of your Secretary for the past twelve months. It is my intention to make this as comprehensive as possible, without being complicated or tedious; in other words, I wish to make it so plain that there can be no misunderstanding or mistake.

The work of the Secretary has greatly increased, and, I presume, will continue to increase, as organized medicine flourishes and our membership increases, and our various undertakings are pushed forward to completion.

From the various Districts encouraging reports are coming in. The Second and Sixth Councilor Districts have been organized since our last report, leaving the Fourth alone unorganized. The District Society meetings have been well attended, so far as reports received at this office go to show.

Sharpe County organized last year and sent in their report, which was received at Hot Springs during the annual session held there; but was not delivered to us there, through some blunder of the Postoffice. Their report and dues for membership were received after your Secretary's return home to Little Rock. It is now with the House of Delegates to examine their report and issue them a charter.

Bradley County was organized last year and had their representatives and report to the Arkansas Medical Society at our last meeting.

We have now unorganized the following counties: Crittenden, Cross, Fulton, Izard, Marion, Montgomery, Poinsett, Scott, Stone, Van Buren.

From the newspapers I see that Montgomery County has organized some kind of a medical society; but up to this date no report has been received at this office.

The Cross County Medical Society, which is still defunct, has not yet returned to the fold. They still have the charter and all efforts of your Secretary have failed to secure its return to the State Society.

We have now a total of 65 counties organized, with a total membership of — as against 804 last year, and ten counties not organized, as shown above. The gains in membership is —; losses —; net gain in members —.

The receipts for the year have been as follows:

Ballance on hand at last report.....\$		
Received from Dues		
From sales of "Transactions".....		
From sales bound volumes JOURNAL....		
Miscellaneous receipts		
The disbursements have been as follows:		
Paid Councilors	\$250	
Honorarium State Secretary	200	
Printing and stationery		
Express and postage paid		
Service of stenographers		
Other clerical assistance		
Miscellaneous expenses		
Medal for Unversity of Arkansas	25	
To balance from last year's report	\$ 3 40	\$
Dues from County Medical Societies as per itemized list attached		1,780 00
Subscription to Journal.....	5 50	
List attached, extra Journals sold	1 00	
Bound Journals sold	20 00	
Collection for advertising in Journal	507 73	534 23
Protest fees returned by Dr. Scales.....		
"Transactions" sold		2 40

By sundry expenses paid as follows:

Office postage	24 09	
Telephone and telegrams	19 25	
Express, Drs. Matthews and D.	1 60	
Express Constitution, etc., ..	1 20	
Dray on Records and Papers ..	1 00	
Janitor at Hot Springs.....	1 50	
Entertain Dr. Matthews.....	10 00	
F. C. Kirkwood, collection..	11 38	
Membership American Medical Editors' Association....	2 00	
Refund Dr. Kimbro, Lincoln Co.	2 00	
Exchange on check	10	
.....	74 12	
Less warrant No. 109.....	10 30	57 82
Cash to Kellogg Newsp. Co....		125 00
Cash to Dr. Scales, Treas....		896 24
Balance in hand.....		1,247 27
		2,326 33

RECEIPTS FROM COUNTY MEDICAL SOCIETIES.

	1906	1907	Total
Arkansas	\$	\$28 00	\$28 00
Ashely	4 00	30 00	34 00
Baxter		6 00	6 00
Benton		54 00	54 00
Boone	4 00	28 00	32 00
Bradley	14 00	22 00	36 00
Calhoun	2 00	10 00	12 00
Carroll	2 00	20 00	22 00
Chicot		20 00	20 00
Clay		22 00	22 00
Clarke	26 00	28 00	54 00
Cleveland		26 00	26 00
Columbia	2 00	22 00	24 00
Conway		28 00	28 00
Craighead			
Crawford	12 00		12 00
Dallas		16 00	16 00
Desha		20 00	20 00
Drew		32 00	32 00
Franklin	20 00		20 00
Faulkner		28 00	28 00
Grant			
Green	4 00	30 00	34 00
Hot Springs-Garland	2 00	100 00	102 00
Hot Spring		14 00	14 00
Hempstead		28 00	28 00
Howard-Pike		22 00	22 00
Jackson		26 00	26 00
Independence	36 00	22 00	58 00
Johnson	36 00	38 00	74 00
Jefferson	62 00	48 00	110 00
Lafayette	18 00		18 00
Lawrence	2 00	38 00	40 00
Lee		26 00	26 00
Little River		8 00	8 00
Lincoln		16 00	16 00
Logan	18 00		18 00
Lonoke	4 50	34 00	38 00
Madison	2 68		
Miller		36 00	36 00
Mississippi			
Monroe		30 00	30 00
Nevada	24 00		24 00
Newton			
Ouachita		34 00	34 00
Perry		8 00	8 00
Polk	2 00		2 00
Phillips		36 00	36 00
Pope		18 00	18 00
Prairie		18 00	18 00
Pulaski		130 00	130 00
Randolph			
Saline	2 00	16 00	18 00
Sebastian	6 00	80 00	86 00
Searcy		12 00	12 00
Sevier			
Sharpe	6 00		6 00
St. Francis	4 00	20 00	24 00
Union		42 00	42 00
Washington	2 00		2 00
Woodruff		26 00	26 00
White-Cleburne	6 00	32 00	38 00
Yell		32 00	32 00
May 10, Total	320 00	1,460 00	1,780 00

RECEIPTS FROM SUBSCRIPTIONS TO JOURNAL.

Dr. J. E. T. Holliman	\$1 00
Dr. J. A. Burnett (6 months)	50
Dr. W. P. Bailey	1 00
Dr. J. B. Bond	1 00
Dr. S. A. Smith	1 00
Dr. W. A. Thompson	1 00

5 50

SALE OF EXTRA JOURNALS.

Dr. W. S. Stewart	1 00
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SALE OF TRANSACTIONS.

Dr. M. L. Norwood	2 40
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RECEIPTS FROM SALES OF BOUND VOLUMES OF JOURNAL.

Dr. L. Kirby	\$ 80
Dr. T. B. Kirby	80
Dr. M. L. Norwood (2)	1 60
Dr. W. W. Hippolite	80
Dr. J. H. Weaver	80
Dr. J. J. Morrow	80
Dr. R. C. Dorr	80
Dr. P. E. Thomas	80
Dr. S. M. Carrigan	80
Dr. C. M. Trotter	80
Dr. J. M. Childers	80
Dr. O. A. Jamison	80
Dr. Oscar Dowling	80
Dr. C. M. Bourland	80
Dr. C. J. Marsh	80
Dr. F. T. Isbell	80
Dr. A. L. Goacher	80
Dr. Vernon McCannon	80
Dr. E. E. Barlow	80
Dr. Olander Howton	80
Dr. T. T. Wood	80
Dr. J. J. Moncrief	80
Dr. R. O. Wozeneraft	80
Dr. A. M. Stover	80

Total\$20 00

RECEIPTS FROM ADVERTISING IN JOURNAL.

From

Dr. E. C. Thorne	\$ 1 00
Abbott Alkaloidae Co.	43 50
Nettie Klein	5 00
O. K. Houck Co.	40 50
New Orleans Polyclinic	6 00
University of Arkansas	37 50
Dr. J. C. Minor	5 00
Lambard Pharmacal Co.	64 01
Alsopp & Chapple	12 00
Dr. Broughton's Sanitarium	28 00
Kress, Owen & Co.	15 00
Dr. Keating Baudrey	5 00
Cincinnati Sanitarium	12 50
Spott & Jefferson	8 75
Dr. S. T. Rucker	10 00
Parke, Davis & Co.	29 17
Jones House Furnishing Co.	15 00
Barnes Medical College	10 00
The Purton Sanitarium Association.	30 00
M. M. Cohn Co.	25 00
Runyan & Shinault	5 00
J. F. Dowdy	17 50
Snodgrass & Bracey	10 00
A. C. Read	10 00

Medical Recorder, Dr. Dowling	\$ 10 00
F. W. McClerkin	17 50
Dr. Z. N. Stuart	5 00
J. A. Jungkind	5 00
Silver City Sanitarium	10 00
H. K. Mulford Co.	9 80
Scales & Duckworth	5 00

Total\$507 73

ACCOUNTS RECEIVABLE.

Advertising	Ledger	Page	
Jno. T. Milliken	73		\$ 50 00
University of Arkansas	74		37 50
Arthur Peters & Co.	75		30 00
Abbott Alkaloid Co.	80		50 00
Dr. Broughton's Sanitarium	81		30 00
Kress, Owen & Co.	82		15 00
J. W. Vestal	82		25 00
Cincinnati Sanitarium	83		30 00
Confection Chair Co.	83		5 00
Mercantile Trust Co.	84		30 00
The Sleaker Society	84		30 00
Spott & Jefferson	84		8 75
Dr. Petty's Retreat	85		30 00
College of Physicians and Surgeons	85		53 00
Hotel Marion	85		50 00
Dr. S. T. Rucker	86		42 50
J. A. Jungkind	104		12 50
Parke, Davis & Co.	105		20 83
Jones House Furnishing Co.	105		15 00
O. K. Houck Piano Co.	105		9 50
Dr. R. H. T. Mann	108		5 00
Dr. J. P. Shepard	115		1 00
Dr. C. C. Stephenson	77		9 75
Total			\$590 33

BOUND VOLUMES JOURNAL.

Dr. W. S. Stewart, White Oak	\$ 80
Dr. T. B. Young, Springdale	80
Dr. H. H. Nickens, Wesson	80
Dr. M. J. Barlow	80
Dr. J. W. Meek, Camden	80
Total	\$ 4 00
Deposit Ballance in U. S. Postoffice for Postage	6 15

Total\$600 48

The loss in membership during the past year
has been as follows:

Arkansas.	Lafayette.
Ashley.	Lawrence.
Baxter.	Lee.
Benton.	Little River.
Boone.	Logan.
Bradley.	Lincoln.
Calhoun.	Lonoke.
Carroll.	Madison.
Chicot.	Miller.
Clark.	Mississippi.
Clay.	Monroe.
Cleveland.	Nevada.
Columbia.	Newton.
Conway.	Quachita.
Crawford.	Perry.
Craighead.	Phillips.
Cross.	Polk.

Dallas.	Pope.
Desha.	Prairie.
Drew.	Pulaski.
Franklin.	Randolph.
Faulkner.	Saline.
Grant.	Searcy.
Garland.	Sebastian.
Greene.	Sevier.
Hempstead.	St. Francis.
Hot Spring.	Sharpe.
Howard-Pike.	Union.
Independence.	Washington.
Jackson.	White-Cleburne.
Jefferson.	Woodruff.
Johnson.	Yell.

Total gain in membership ———.

Total loss in membership ———.

Net gain in membership ———.

The gain in membership during the past year has been as follows:

Arkansas.	Lafayette.
Ashley.	Lawrence.
Baxter.	Lee.
Benton.	Little River.
Boone.	Logan.
Bradley.	Lincoln.
Calhoun.	Lonoke.
Carroll.	Madison.
Chicot.	Miller.
Clark.	Mississippi.
Clay.	Monroe.
Cleveland.	Nevada.
Columbia.	Newton.
Conway.	Ouachita.
Crawford.	Perry.
Craighead.	Phillips.
Cross.	Polk.
Dallas.	Pope.
Desha.	Prairie.
Drew.	Pulaski.
Faulkner.	Randolph.
Franklin.	Saline.
Grant.	Searcy.
Garland.	Sebastian.
Greene.	Sevier.
Hempstead.	St. Francis.
Hot Spring.	Sharpe.
Howard-Pike.	Union.
Independence.	White-Cleburne.
Jackson.	Washington.
Jefferson.	Woodruff.
Johnson.	Yell.

Total gain in membership ———.

Total loss in membership ———.

Net gain in membership ———.

The following publications have been received regularly during the year in exchange for the Journal of the Arkansas Medical Society:

Medical Recorder.

Medical Bulletin.

Medical Summary.

Pennsylvania State Medical Journal.

Pennsylvania Medical Journal.

Medico-Legal.

California State Journal of Medicine.

New York State Journal of Medicine.

Medical Age.

Southern Clinic.

California Medical Journal.

New York and Philadelphia Medical Journal.

Therapeutic Gazette.

Medical Review of Reviews.

Detroit Medical Journal.

Kentucky State Medical Journal.

Proceedings of the Phila County Medical Society.

Alkaloidal Clinic.

Regular Monthly Medical Visitor.

Southwestern Medicine.

St. Louis Medical Review.

Texas State Journal of Medicine.

Journal of the Kansas Medical Society.

American Journal of Clinical Medicine.

Journal of the Medical Society of New Jersey.

Journal of the South Carolina Medical Association.

Pennsylvania Medical Journal.

Ohio State Medical Journal.

Detroit Medical Journal.

International Journal of Surgery.

The Medical Bulletin.

The Journal of the New Mexico Medical Association.

Hot Springs Medical Journal.

Medical Herald.

Colorado Medicine.

In addition to this, I beg to say that copies of the works which have been received in the Journal from time to time, are now in the hands of the Secretary, and an offer has been made by a firm in New York to purchase these volumes. By reference to the Book Review of the different numbers of the Journal you will find an itemized list of these books.

The matter of adopting uniform constitution and by-laws, which was up for consideration at our last meeting and which was carried over to this year, owing to a supposed irregularity, comes up again for this session. I trust that it will be acted upon without any further delay. Your Secretary has tried to discharge his duty in this matter as fully as outlined by our last year's House of Delegates, that is, the revised Constitution and By-Laws have been published in the

Journal twice preceding the annual meeting, giving longer notice than the prescribed time, and a copy was sent to every county secretary for the purpose of reading it in open meeting, as prescribed by law.

Within the last two or three months your Secretary has been in active correspondence with the officers of the American Medical Association, relative to putting into Arkansas a corps of paid canvassers for the purpose of securing applications for membership from eligible physicians who have not been approached upon the subject, as well as to urge upon those who are for various and sundry reasons remaining outside of organized medicine. We conceived it our duty to adopt this method, believing that it is the best way to deal with the question. There are estimated to be in Arkansas something like 3,700 to 4,000 physicians. Of this number we have less than one thousand belonging to our State Society, leaving 2,700 to 3,000 doctors outside of organized medicine. Of this number we have to reckon with the wilful, non-affiliated graduate, the licensed under-graduate, and our brethren of the homeopathic and eclectic schools. The latter two, however, form a very small part of the number of physicians enumerated above, and have their own societies. Other States are now recognizing the fact that the licensed under-graduate is better on the inside than on the outside, and, then, organized medicine can do these people good. Now, if this class of people can be reached, there is no doubt but what the membership of our State Society can be materially increased and its scope and influence enlarged and strengthened. There is one thing sure, we will either have to increase our membership or increase our dues, or lessen our expenses; as from what you have heard relative to receipts and expenditures, you can readily see wherein an increase in our membership is more desirable than an increase in our dues, or a step backwards.

After consultation with eight of the councilors and with the support and co-operation of our President, we decided to put the canvassers to work, and active operations were begun some weeks ago. I am pleased to say that although the canvass has not progressed to any considerable extent, your Secretary has received quite a number of applications taken by these gentlemen; and I trust every member of the Arkansas Medical Society will extend to them a helping hand in their labors throughout the various counties of our State. They come to us highly recommended by the American Medical Association, who has had them at work in the States of Missouri and Texas, where the most gratifying results have been achieved.

The plan above outlined is this: the paid canvasser secures the application and turns it over to the County Secretary, sends a duplicate to your State Secretary, and the triplicate copy he retains to accompany his report to the Secretary of the American Medical Association. We pay one dollar for every member actually secured; but not until his election to your county society, and your county secretary reports his name to the State Society with remittance to cover dues; then our State Society is due the A. M. A. one dollar for each name.

Just a word concerning our Journal: it must be considered and remembered that the cost of publication this year has been materially increased, while our dues have remained the same as heretofore. Your Secretary will trespass upon the report of the Committee on Publication to say that our Journal is now accepted as being the equal of any similar publication in the United States. We do not wish to be understood as throwing bouquets to the Editor of the Journal or the Publication Committee, yet it is a fact that the editor is in position to know the opinions of others concerning our publication better than any one else in the State Society; and I take this means of letting you know the status of our Journal and the position it occupies, without arrogating any undue praise or feeling of self-esteem, but merely as a fact, which I wish to be received as I am stating it. I shall not tell you the influence of our Journal, except in this general way. If it is the sense of the House of Delegates to continue the publication of the Journal of the Arkansas Medical Society, I can only say that we shall be keeping pace with other States; if we take a step backward, it will be harder to regain what we have lost than to maintain our present status.

It may not be out of place here to say that in the matter of advertising, we are disappointed from the simple fact that there has been a disposition to criticize the acceptance of any advertisement which will not bear the closest scrutiny. These criticisms we think are just, and so firmly were we of the opinion that no other course was permissible, and in order that there might not be any room for censure, your Secretary decided that as editor of the Journal, he would not consider a single contract for advertising any preparation that had not been passed by the Council on Pharmacy and Chemistry. Were we to open the columns of the Journal to any and all houses, our receipts from this source alone would be sufficient to pay the expenses of our Society.

In closing this report I beg to say that I took it upon myself to ask for bids for publishing a 32-page Journal next year; 100 copies wrapped, addressed and delivered to post-office; and so much per 100 for each additional one hundred

copies added as our membership increases, and so much for each advertising page added over and above what we are now carrying, should our advertising matter increase.

We are publishing now 1,100 copies every month. About 1,000 to 1,050 are sent to our members and exchanges, and 25 to 50 left in the Secretary's office as extras to supply requests from members and our friends throughout the country, who may wish additional copies.

We made an arrangement with our publisher last year to publish and bind 400 copies of the Journal for sixty cents per volume, estimating that four hundred of our members would want bound copies, the publisher agreeing to take care of two hundred copies additional to this, without any extra charge to the Society, provided we would do this. We entered into this contract for four hundred volumes in order to secure needed concessions along other lines of expenditures in connection with the publication of the Journal. We regret to say that our expectations have not so far been realized. Up to this writing only about thirty orders have been received for bound volumes. Unless the members of the State Society individually purchase these volumes, the cost will necessarily devolve upon the exchequer; which will amount to something in our expense column. These volumes are here bound and ready for delivery; and I urge upon our members to come forward and relieve your Committee on Publication of this burden.

In conclusion I wish to return my sincere thanks to the officers and members of the Arkansas Medical Society for the uniform courtesy that has been shown me during the past twelve months. The labors of the office have been arduous. It has been next to impossible to devote the time required to conduct the work of the Secretary's office, look after necessary correspondence, send out mail and express packages, and reply promptly to the numerous enquiries received, as sometimes we have been deluged with work, but have managed by perseverance to keep within the bounds of toleration. How far short I have fallen in keeping up with the duties incumbent upon me, remains for you to say. I trust, however, that I have conducted the office so as to meet in some degree, your expectations; and I thank you for all honors that you have conferred upon me, and especially for the patient endurance and tolerance that you have manifested during this year which is now closing. I feel confident that you will pass lightly over anything that seems to invite criticism, and will attribute any outcropping of bad judgment to errors of the head and not of the heart.

Respectfully submitted,

C. C. STEPHENSON, Secretary.

The next order was the reading of the report of the Treasurer. A motion by Dr. Fink, of Helena, that the report be referred to the Auditing Committee, was seconded and carried.

REPORT OF THE TREASURER.

To the President and Members of the Arkansas Medical Society:

I beg leave to submit herewith, the following report of the receipts and disbursements of this Society during the past year, to wit:

RECEIVED FROM SECRETARY.

May 18th, 1906	\$1,683 68
May 30th, 1906	186 84
June 28th, 1906	104 06
July 30th, 1906	80 34
Nov. 23d, 1906	100 00
Dec. 17th, 1906	100 00
Apr. 17th, 1907	125 00
May 4th, 1907	100 00

Total receipts\$2,479 92

DISBURSEMENTS.

Voucher No. 92 for	\$ 37 80
Voucher No. 93 for	200 00
Voucher No. 94 for	25 00
Voucher No. 95 for	25 00
Voucher No. 96 for	25 00
Voucher No. 97 for	25 00
Voucher No. 98 for	25 00
Voucher No. 99 for	25 00
Voucher No. 100 for	25 00
Voucher No. 101 for	25 00
Voucher No. 102 for	25 00
Voucher No. 103 for	25 00
Voucher No. 104 for	10 00
Voucher No. 105 for	925 00
Voucher No. 106 for	55 28
Voucher No. 107 for	60 90
Voucher No. 108 for	4 00
Voucher No. 109 for	14 40
Voucher No. 110 for	10 00
Voucher No. 111 for	31 80
Voucher No. 113 for	13 00
Voucher No. 114 for	5 32
Voucher No. 115 for	44 56
Voucher No. 116 for	258 86
Voucher No. 117 for	3 15
Voucher No. 118 for	3 15
Voucher No. 119 for	100 00
Voucher No. 120 for	100 00
Voucher No. 121 for	100 00
Voucher No. 122 for	125 00
Voucher No. 123 for	25 00

Total Disbursements\$2377 22

Balance on hand 102 70

\$2479 92

Respectfully submitted,

J. W. SCALES, Treasurer.

The next order of business was the report of the Committee on Scientific Work, which was on motion duly received.

REPORT OF THE COMMITTEE ON SCIENTIFIC WORK.

To the House of Delegates:

Your Committee on Scientific Work, beg leave to report to you that we have been in close touch with the Section Secretaries, and through their co-operation and assistance we have been enabled to formulate the program which we now submit for your consideration.

Your committee thought best to provide for one day's work for the deliberations of the House of Delegates, that this branch might be completed, so there would be no interference whatever with the work of the scientific sections. To this end we decided that the House of Delegates should meet at 8:30 on the morning prior to the General Session, and put in the entire day, and, if necessary, adjourn until evening and then resume work, in order to finish up, if possible, before the general session.

You will observe that we have on our program this year, gentlemen of national reputation. These, we are assured, will come to us with a message which will be acceptable and highly appreciated. We trust that our members will one and all give these gentlemen a cordial greeting, and let them understand that organized medicine in Arkansas is equal to any in the United States in point of affability and congeniality.

Respectfully submitted,

C. C. STEPHENSON, M. D.,

Chairman.

The next in order was the reading of the report of the Committee on Public Policy and Legislation. Dr. Isbell moved that the report be received, which, being seconded, was carried.

REPORT OF THE COMMITTEE ON PUBLIC POLICY AND LEGISLATION.

To the House of Delegates of Arkansas Medical Association:

I am informed that the Secretary on Medical Legislation of our committee, Dr. Williamson of Marrianna, is not in attendance. I therefore report that there has been very little progress made since our last meeting. We made a desperate fight to get the Paterson-Black Bill through but failed; other matters were handled likewise. The Greenhaw bill passed and is a law. However, our committee had nothing to do with it. Its origin no doubt was from the patent medicine side, and its object to kill the Patterson-Black bill, which it did.

Our last battle was with the Barker Mental Therapeutic Bill which passed the House and gave us trouble in the Senate, as it had some of our most representative Senators on its side. How-

ever, the bill never came to a vote in the Senate. So by the time this battle was over and was nearing a close, we thanked the Lord we were able to keep what we had.

C. R. SHINAULT.

The President called for the report of the Publication Committee, but as the Committee was not ready to report, further time was granted. Subsequently the report was filed without being read.

REPORT OF THE PUBLICATION COMMITTEE.

To the House of Delegates:

Your Committee on Publication begs leave to submit to you the result of their labors, as follows:

We contracted with the A. N. Kellogg Newspaper Company for the publication of a forty-eight page Journal, which you have received monthly during the entire year. This journal has been an expensive publication, due, however, to increase in cost of material and labor pertaining to the printer's art. Our Journal as presented to you we believe will bear comparison with that of any Journal published by any other State in the Union. We say this, however, without any intention of boasting; but we honestly believe that we are not behind any State in the matter of our State publication. We only wish that you knew the opinions of other States concerning our Journal; modesty, however, might forbid any further mention than what has been made in your Secretary's report.

We contracted also for the various stationery that was necessary for the transaction of the duties of the Secretary's office; and we also contracted for the binding of four hundred volumes of your Journal, expecting the membership to order at least that number through your Secretary upon his call. We regret exceedingly to state that less than fifty orders have been received. It is now with the membership of the State Medical Society to take these volumes or leave them on hand, necessitating an order to be drawn on your Treasurer for payment of the bill. We urge upon you, gentlemen of the House of Delegates, to impress upon the members individually to secure a copy of the bound volume, thus relieving your Publication Committee of this obligation without drawing upon the Treasurer for one penny.

We beg to state that we have also entailed some expense upon the Society in getting out various circular letters, etc. which have been published from time to time, and which you have received in due course.

The closing year has had its share of annoyances and vexations, which have been petty, however, and have been overcome. We now enter upon another year, feeling that we have done the best that we could under the circumstances; and we trust that our labors have met, in a reasonable degree, your approval.

Respectfully submitted,

C. C. STEPHENSON, Chairman.

Committee on Publication.

COMMUNICATION FROM DR. L. P. GIBSON.

Under the head of "New Business," Dr. Frank Vinsonhaler presented a communication from Dr. L. P. Gibson, of Little Rock which was read, and was as follows:

To the House of Delegates of the Arkansas Medical Society:

I am impelled by a sense of duty to the Arkansas Medical Society to transmit, without comment, the following statement of facts:

The General Assembly of Arkansas passed an act entitled "An Act to Regulate the Practice of Medicine and Surgery, and Providing for the Appointment of Three Boards of State Medical Examiners and Defining Their Duties," approved February 17, 1903; which said act went into effect ninety days after its approval, and will be found on page 26, Acts of 1903.

By the provisions of Section 1 of said Act, now known and codified as Section 5281 of Kirby's Digest, provides as follows:

Section 1. That the medical examiners herein provided for shall consist of three boards: One of physicians and surgeons, recommended by "The Homeopathic Medical Society of Arkansas;" one of physicians and surgeons, recommended by "The Arkansas State Eclectic Medical Society;" and one of physicians and surgeons, recommended by "The Arkansas Medical Society."

"There shall be seven (7) members of each board, appointed so as to have one member from each congressional district upon each board. The appointment shall be made by the Governor, from a list of names presented by the respective medical societies."

Section two of same act provides that vacancies in said Boards shall be filled as they occur by appointments from lists furnished as provided. No member shall be appointed for more than two terms in succession; and no member, or professor, or teacher in a Medical College, or school, or University having a Medical Department, shall be appointed upon the Board.

Section 15. The Boards shall annually file with the Governor a report of their transactions during the year, giving the names of all to whom

they have granted certificates during the year, naming the system of medicines practiced by each, and shall in such report show the amount of money received and from what source, the amount expended, and for what purpose, and shall embody in their report any other matter or facts deemed expedient, and make such recommendation for the improvement of the practice of medicine in this State as may be deemed advisable. If the Boards shall have sufficient funds on hand to pay for same, they shall have said reports printed in pamphlet form and furnish each physician in this State with a copy thereof."

At the meeting of the Arkansas Medical Society held at Jonesboro, April 30, May 1-2, 1903, the President, Dr. R. C. Shinault, in his address, said: "We now have a State Board of Medical Examiners composed of seven physicians who are recommended by the State Medical Society. This Society is certainly more competent to judge of the qualifications of an examiner, than is the county judge, and this change is, I think, a long stride in the right direction." The transactions of the Arkansas Medical Society show that at the meeting at Jonesboro, April 30, May 1-2, 1903, the following were elected and ordered certified to the Governor as the list from which appointments to the Board of the Arkansas Medical Society were to be appointed. Viz.:

1st Congressional District: Drs. C. R. Shinault, Helena; B. L. Harrison, Jonesboro, and A. B. McKinley, Conway.

2nd District: Drs. W. B. Lawrence, Batesville, and O. E. Jones, Newport.

3rd District: Drs. F. B. Boyson, Springdale; C. E. Hurley, Bentonville, and G. V. Poynor, Green Forest.

4th District: Drs. M. L. Norwood, Lockesburg, and W. L. Parchman, Van Buren.

5th District: Drs. J. P. Runyan, and L. P. Gibson, Little Rock.

6th District: Drs. Wm. Crutcher, Pine Bluff; Vernon McCammon, Arkansas City, and G. A. Herbert, Hot Springs.

7th District: Drs. Adam Guthrie, Prescott; J. W. Meek, Camden, and W. A. Longino, Magnolia.

On pages 118-119 of the transactions for 1903, occurs the following: "Dr. Drennen (now President of the Arkansas Medical Society), 'We have two men recommended for the Board of Examiners in some districts, and three in others. If, perchance, Gov. Davis should fail to appoint any one of those three or any one of the two, what sort of a position will it leave us in? The House of Delegates would necessarily have to be re-assembled or else they would have to indicate to the Councillors. It would be with the Councillors or the House of Delegates. It would be very expensive to summon this House of Delegates, and

I think it would be wise to take the matter up at this time and make some provision of that sort."

"The Secretary (Dr. J. P. Runyan): 'Regarding the subject brought up by Dr. Drennen, I don't see how Governor Davis can refuse to accept one of those three gentlemen to put on the Board. Should he refuse, and we set the precedent by allowing him to have some other man put on the Board, he could then refuse to put that man until you put another one on, and so on until he gets the man he wants. So what's the use of letting the thing go on like this? (Applause.)'" At the session of the Arkansas Medical Society held at Texarkana, May, 3, 4, 5, 1904, Dr. C. R. Shinault sent the following communication to the Society. (Page 49):

"To the Arkansas Medical Society:

I hereby tender my resignation as a member of the Arkansas State Board of Medical Examiners, having moved out of the district from which I was appointed, in order that my successor may be elected at this meeting.

In severing my connection from the Board I wish to express my deep sense of appreciation of the honor they conferred.

Very truly,

(Signed) C. R. SHINAULT."

May 4, 1904.

Dr. Fink of Phillip; Dr. Dickson, of Greene, and Dr. Harrison, of Craighead, were selected as the three whose names were to be sent to the Governor, one of which to be appointed on the State Board of Medical Examiners, to fill the vacancy caused by Dr. Shinault's resignation. (Page 89, Transactions, 1904.)

In 1906 a Medical school was organized in Little Rock, and the Secretary of the Board of Examiners of the Arkansas Medical Society became a member of the faculty of said Medical school.

On the ——— day of ———, 1906, Dr. J. P. Runyan resigned the office of Secretary of the State Board of Medical Examiners of the Arkansas Medical Society. Later, on the ——— day of ———, 1906, Dr. Runyan resigned as a member of said Board.

It was published in the papers at the time that the Governor appointed Dr. L. E. Love, of Dardanelle, a member of this Society, to fill the vacancy caused by the resignation of Dr. Runyan.

On seeing this, I wrote to the Secretary of the Arkansas Medical Society, asking whether the name of Dr. Love had been certified to the Governor as on the list selected by the Arkansas Medical Society, and if the names of Dr. J. P. Runyan, and L. P. Gibson, had ever been certified. To this inquiry, the Secretary replied that he had not certified the name of Dr. Love, and that he did not know whether the names of Drs. Run-

yan and Gibson had been certified, as he was not at that time Secretary of the Arkansas Medical Society.

I at once wrote to Dr. L. E. Love, at Dardanelle, and enclosed the letter in a return envelope. The letter in substance stated, that I wrote in a friendly spirit and with the view of preventing further controversy. I quoted the provisions of the Medical Law, concerning original appointments and filling vacancies, and concluded with a statement that while neither the honor nor emoluments of the position were worth a controversy, I notified him that if he accepted the position, I felt it a duty I owed to the Arkansas Medical Society to leave no proper means unemployed to have the law complied with. To this letter I have never received any reply.

In January, 1907, when the Board of Examiners met in Little Rock, and it was stated that Dr. Love was acting with the Board, I with two other members of the Arkansas Medical Society called on the Attorney General, Mr. Kirby, and laid the case before him.

The Attorney General said he would investigate the matter and either apply for a writ of quo warranto himself, or would permit my attorney to use his name for the purpose.

I immediately engaged counsel, who prepared the papers and presented them to the Attorney General for his approval.

The following letter of the Attorney General is self-explanatory:

Little Rock, Ark., Jan. 26, 1907.

Col. B. S. Johnson,

Attorney-at-Law,

Dear Sir:—After the interview with you this morning, in which you, representing the Arkansas State Medical Society, presented a petition for my opinion and approval, praying a Writ of Quo Warranto by the Attorney General to oust one L. E. Love, from the position of a member of the State Medical Board of the Arkansas Medical Society, I made request upon the Chief Executive for information of any list of nominees filed by said Arkansas Medical Society in the governor's office, or presented there, of the names contained upon said list, and any record or memoranda thereof, also, for information as to the resignation of Dr. J. P. Runyan, or any record, evidence or memoranda thereof, and also as to any record, memoranda, or evidence of an appointment to fill the vacancy upon said Board caused by the resignation of said Dr. Runyan.

I am advised that after diligent search made there, no list of names presented by the Arkansas State Medical Society for membership on said Board, can be found, and no record, memoranda, or evidence thereof, in said office; that no resignation of Dr. J. P. Runyan, nor record, nor memo-

randa thereof, can be found, nor any appointment of his successor, nor evidence thereof.

In the copy of the petition you left with me, it is stated: "The Arkansas Medical Society made its list of recommendations from physicians and surgeons, from which the said vacancy was to be filled. That the same was sent to the Secretary of State for the use of the Executive, etc.," and I doubt, if that was the case, whether the list of names was presented to the Governor within the meaning of Section 5231, or whether he would be bound to take any notice of such list.

I do not know what the proof would be on this point, and since there is no list nor record of any list of names nor resignation nor appointment, nor record nor memoranda thereof, in the Governor's office, no evidence at all of any of these facts within the department where it should be, and since Dr. Love's term will expire at the April meeting of the Board, the first regular meeting after this date, if I am correctly informed, it does not seem to me that the interest of the State requires a Quo Warranto proceeding, or that there would be a reasonable hope for a successful termination of such proceedings to oust him. I have not, therefore, signed this petition.

When I discussed the matter with the members of the committee of physicians, I supposed of course that the law had been complied with fully, relative to the presentation of list, etc., and that the list or record of it and names and facts were in possession of the department and within my reach.

Respectfully,

(Signed) W. F. KIRBY,
Attorney General.

In presenting this statement for your consideration, I am unbiased by personal consideration, though a gross injustice has been done me, and I leave it entirely to your sense of justice not only to right the wrong that has been done me, but the greater wrong that has been done the Arkansas Medical Society and the entire Medical profession of our State.

Very respectfully,

L. P. GIBSON.

In the discussion of this letter, Dr. Vernon McCammon, Arkansas City, a member of the State Board, said he was familiar with the facts complained of in Dr. Gibson's letter, and it looked reasonable that Gov. Davis should appoint Dr. Gibson to fill the vacancy caused by Dr. Runyan's resignation, but the Governor only wanted a small loop-hole as an excuse to appoint another. He said it was a well known fact, if not openly expressed, that in order to

get Dr. Runyan appointed on the Board, who deserved it on account of his great and active interest in the securing of the passage of the new law, it was necessary to put one on the list who was personally objectionable to the Governor. He did not believe the matter actionable, unless it be to censure the acts of the Governor. Whether or not the Governor could be enjoined from going beyond the list submitted by this Society, is a question of law. Personally, Dr. McCammon felt aggrieved that Dr. Gibson did not receive the appointment, for a dangerous precedent has been established and the law should be amended to meet future exigencies.

Dr. Vinsonhaler inquired if the law did not specifically say that the Governor *shall* appoint from the list, to which Dr. McCammon replied, that, though not a legal man, in his opinion, it did.

Dr. E. R. Dibrell, Little Rock, did not believe the subject should pass without an investigation, and moved to have the matter referred to a committee.

The motion was seconded and carried, and the President appointed a committee composed of Drs. Fink, Dibrell and F. W. Jelks.

Upon suggestion of Dr. Fink, the President requested the Delegates comprising the various Councilor Districts to assemble for the purpose of selecting their nominating officer.

On motion, the House of Delegates adjourned to meet at 2 o'clock, in the afternoon.

AFTERNOON SESSION.

The House of Delegates was called to order at 2 o'clock, by the President.

The first order of business was the selection of the Nominating Committee, which was as follows: Drs. A. B. McKinney, First District; W. B. Lawrence, Second District; A. A. Horner, Third District; Vernon McCammon, Fourth District; H. H. Neihuss, Fifth District; F. T. Isbell, Sixth District; F. W. Jelks, Seventh District; E. R. Dibrell, Eighth District; J. J. Morrow, Ninth District, and M. S. Dibrell, Tenth District.

RESOLUTION.

Dr. Fink, Secretary of the Council, introduced the following resolution, which was adopted:

WHEREAS, The new Constitution and By-Laws make the Council the most important body within the Society upon which its future welfare will depend, Therefore, be it,

Resolved, That the Council recommends that the House of Delegates instruct the Nominating Committee in their selection of Councilors of the Arkansas Medical Association that only such be chosen as are trained, seasoned members, thoroughly identified with the Society and its traditions, and who are known to be fitted and in thorough accord with medical organization.

Respectfully submitted,

G. A. WARREN, Chairman.

M. FINK Secretary.

ADOPTION OF NEW CONSTITUTION
AND BY-LAWS.

Under the order of "Unfinished Business," the Secretary called for consideration of the proposed new Constitution and By-Laws, as reported by the Committee appointed at the last annual session held at Hot Springs, which report was published in full in the JOURNAL.

Dr. Young, of Springdale, was the only member of the Committee present, and suggested that before the question of its adoption be put, consideration be deferred pending the arrival of Dr. Breathwit, another member of the Committee, who was in the city, but could not be present just at this hour. Especially did he desire this for the reason that the Committee was appointed during the closing hours of the last session, and their work was so hastily done in order that their report might be submitted before adjournment, that errors occurred, and many discrepancies between the report and that which was published in the JOURNAL, have been observed, and, although none are of vital importance, yet there should be a consultation between this Committee and the Secretary and stenographer before final action was had.

Dr. Stephenson remarked that inasmuch as the Committee had been discharged, the question should be upon consideration of the report.

A motion by Dr. W. B. Lawrence, Batesville, to formally take up for consideration the

adoption of the new Constitution, was seconded and carried.

By request, Drs. Kirby and Guthrie were invited to express their views upon the subject.

Dr. Kirby said the only objection he could raise was that provision was made for a Nominating Committee, but none as to how that Committee should be selected, what their duties shall be, nor how they shall make their nominations. Further than this, he could see no objection to their adoption.

Dr. Adam Guthrie, of Prescott, agreed with Dr. Kirby that Sec. 2, of Art. 5, of the old By-Laws should be retained, as it stated specifically the manner in which the Nominating Committee should proceed, the new Constitution being silent on that point. He furthermore believed the retention of this section would be the means of eliminating "Cross-Roads" politics from the Society.

Dr. Poyner, of Berryville, made a motion to strike out the word "State" and that the official title read "Arkansas Medical Society."

Dr. Horner, of Helena, spoke in favor of the motion, and insisted that as the Society was already recognized by the National Government under the present title, and his County Society had instructed him to vote against any change of name, he would vote for the motion. He referred to the time when Arkansas had two State Societies, praised the late Dr. James A. Dibrell for the gallant fight he made to have the present Society recognized by the Judicial Council of the American Medical Association, and believed that a change of name would create a new Society.

Dr. Kirby, of Harrison, denied that the addition of the word "State" would in any manner change the existing legal relations with the Government or those concerning the State Board of Medical Examiners.

For the benefit of those who were not familiar with it, the President requested the Secretary to read the prefatory note to the Constitution and By-Laws as prepared by the American Medical Association.

Dr. Poyner's motion was carried.

Articles II to X were severally read and adopted without modification.

Article XI was then proposed for adoption.

Dr. Horner, of Helena, moved that said Article be changed to read, "the amount of assessment shall be fixed by the House of Delegates, but shall not exceed the sum of \$2.00 per capita per annum, except on a two-thirds vote of the Delegates present," instead of a "four-fifths" vote. The assessment of \$2.00 per capita was too small, he believed, to meet the necessary expenses of the Society, and the majority to change this assessment was too large.

Dr. Young, of Springdale, pointed to the old Constitution as only requiring a mere majority in order to change the dues, and believed it was wrong. He acknowledged the dues were perhaps too low, but doubted the wisdom of making an increase now for fear of losing too many members. The Constitution could be amended in the future should an emergency require it.

Dr. Butler, of Sheridan, doubted the propriety of making any change in the language of the Article, and expressed the fear that if the dues should be raised it would mean the loss of several members from his County Society, therefore he opposed the motion.

The Article as read was adopted without amendment.

Articles XII to XIV, inclusive, were read and adopted without change. Chapters I to IV, inclusive, of the By-Laws were severally read and adopted, with the exception of Sec. 6, of Chap. IV.

Dr. Jelks, of Hot Springs, moved to amend the Section so as to read, "and shall continue these efforts until every physician in every county of the State who is reputable has been brought under medical society influence," instead of "who can be made reputable." He objected to taking into the Society men who could possibly be made reputable, and believed their character should be predetermined.

Dr. Horner, in seconding the motion to amend, remarked, that it was easier to get ten good men into a Society than to get one bad man out, and his experience of fifty years had taught him this truth. He argued for a clean Society composed of clean men.

A suggestion by Dr. Brewer, of Kerr, that the "word "eligible" should be included in the amendment, was accepted by Dr. Jelks, who said the point was well taken as an applicant might be reputable and yet not eligible according to the requirements of the By-Laws. But to be eligible, he must necessarily be reputable.

Dr. Douglas, of Ozark, stated that his Society had received into full membership two undergraduates, splendid men who were determined to complete their medical education. One had recently graduated at the Medical Department of the University of Arkansas, and the other would complete his education as early as possible. They are good men, good students and are advancing in their work. It seemed to him that if the new organization hoped to accomplish the greatest good, all reputable and legally licensed physicians should be allowed to become members of the Society. They and the whole profession would be uplifted thereby.

Dr. Young, of Springdale, made the point of order that the range of discussion was not germane, and that Section dealing with qualification of members was yet to be considered.

The motion made by Dr. Jelks was carried.

Chapters V to VIII, inclusive, of the By-Laws, were read and adopted.

Dr. Charles Hurley, of Bentonville, called attention to the fact that no provision for the election of alternates was made, and inasmuch as trouble was had in his county, on account of this omission, he suggested that the defect be remedied.

In reply to an inquiry of Dr. Lawrence, of Batesville, as to the basis of representation to the House of Delegates, the Secretary read Sec. 2, of Chap. IV, covering that point.

A motion to adopt Sec. V, of Chap. IX, was made by Dr. Stephenson and received a second.

In discussing this Section, which prescribed the qualifications for membership in County Societies, Dr. Neihuss, of Wesson, earnestly favored the admission of undergraduates, at least those that had passed the State Board of Medical Examiners. He said the State Board had set the standard of Medicine in this State, and it should be so recognized in so far as

making eligible to County Societies those who have successfully passed the required examinations.

Dr. Young, of Springdale, desired to know if the Section as presented by the Committee could be amended at this session, or would striking out the interlineation, "who is a graduate of a reputable medical college" require the matter to go over another year? He believed to amend the present Section would defer action another year.

Dr. Stephenson remarked that the matter was now before the House of Delegates for action, and the Section could be amended as desired.

The President so viewed the matter and the discussion proceeded.

Dr. Butler, of Sheridan, favored the adoption of the Section as amended by Dr. Stephenson. In his county there were more undergraduates than graduates, the only effect of accepting them into the Society would be to inspire them to advance to graduation. He stated that he consulted with them, came in daily contact with them, many were third-year men, all ethical, the Society and they would be strengthened by their adoption.

Dr. Horner, of Helena, who had been identified with the State Society since 1879, believed that to let down the bars to undergraduates would be to invite into the Society a horde of men who would be a discredit to the profession. He said that the State of Arkansas was already far behind other states in educational matters, and if this motion prevailed, it would satisfy the ambition of many undergraduates who perhaps otherwise would continue their studies to graduation. He said because the State Board of Medical Examiners licensed undergraduates, was no reason why they should be eligible for membership in county societies, and believed if we had the proper conception of what should be embraced in a complete medical education, it would not be possible for an undergraduate to come before the Board. The intention of the organizers of this Society was that its membership should be composed of graduates—collegiate equality being

the watch-word—and he would regret to see a backward step taken.

Dr. Adam Guthrie, of Prescott, warned the Society to proceed slowly and discreetly in this matter, for a crisis in the affairs of the Society seemed imminent. He believed it would be misdirected charity to the undergraduate to accept him, and pleaded for the establishment of a line between the graduate and non-graduate.

Dr. Frank Vinsonhaler, of Little Rock, reiterated the views he expressed at Texarkana a few years ago when this same question came up, and held the same opinion concerning it now as at that time. He denied the statement made by Dr. Neihuss that the undergraduates now practicing in the State were creatures of the State Board, but on the contrary, the large majority registered under the old law and county system. He viewed with alarm the attempt to admit all undergraduates, although personally he had many friends among them, and did not deny many were worthy, capable physicians. He did not believe that personal friendships or preferences should be allowed to sway one in matters of judgment as grave as this seemed to be, and the fact that the American Medical Association has practically laid down no qualification at all, is no argument in favor of Dr. Stephenson's motion. He saw no reason why they should not be permitted to participate in the work of the county society, and one strong incentive for them to graduate would be to be eligible for membership in their county society. He closed by remarking, "that if we are to become a political party, it is well enough to admit it now."

Dr. Frank W. Jelks, of Hot Springs, said that as the standard of medical education was being raised by all colleges, so should organized medical societies require a high standard of proficiency in those who would become members, and therefore he believed the undergraduate would be relieved of a great incentive to rapidly obtain his degree, should he be permitted to join the county society. Our motto should be: "Go forward, not backward."

Dr. Young, of Springdale, pointed out that the original draft of this section permitted all undergraduates to become members of county

societies without the payment of dues and be entitled to all benefits, but not legal members of the State Society. For some unknown reason, this clause was omitted in the printed report, and was never corrected.

Dr. Leonidas Kirby, the Nestor of the Society, though not a delegate, was invited to speak to the motion. He said that we had come to the parting of the ways, and what he would say, was after due consideration. He referred to the preamble of the Constitution which said that the object of this Society is to foster scientific work and raise the standard of medical education. If a medical college allows one to graduate on a low standard because he is a good and honorable man; because he is a nice fellow and well thought of in his community, we could with equal propriety say that there is no standard for a man to advance to. The Boone County Society a few years ago admitted undergraduates. They were not allowed to hold office nor permitted to vote on changes in the Constitution and By-Laws. The majority of legal practitioners in his county were undergraduates, and if they were admitted to full membership, as this motion contemplates, they would be in absolute control and the graduate would be in the minority. He made mention of four men who came up for examination before the County Board before the new law was passed, and the highest grade made was thirty per cent. These men went to an adjoining county and obtained license, and now live in Boone county. They are all nice fellows, but are not qualified physicians. Subsequently two of them went to Texarkana to a school which this Society branded as unfit for attendance, and received diplomas, and yet under the provision of this Section, we must associate with this class of men. In closing he said: "There is nothing in the world that succeeds like a strong and compact organization, and we can't have an organization that lacks the right standard. The Jesuits are a strong class because they are organized and admit no one not in perfect sympathy with their cause."

Dr. Douglas, of Ozark, was in favor of the motion, for he believed the American Medical Association had made no mistake in its recommendations. He had no fear that the under-

graduates would ever rule the Society, and if our motives are to strengthen organized medicine, promote professional harmony, encourage scientific work, we must not exclude the undergraduate, for he is the very one that must furnish material for work.

Dr. Mat S. Dibrell, of Van Buren, said that a rather anomalous condition prevailed in his county. After the last meeting of the State Society, the President of the Crawford County Society ruled that undergraduates were admissible, and several are upon the roster who have paid dues. They are ethical gentlemen, two have graduated recently, and the others will go back to college this fall. They take keen interest in Society work, come up with good lessons, and through the influence of the society, have been inspired to prosecute their college work. He said he was not prepared to say what was the best plan to pursue.

Dr. Trussler, one of the canvassers of the American Medical Association, was present, and in response to a request from President Drennen, said that he hoped the Society would not think him intrusive in addressing them upon this subject, for he was entirely free of any prejudice in the matter. His itinerary had carried him over many counties in Kansas, Missouri, Texas and Arkansas, and he had failed yet to see an instance where the undergraduate had not strengthened the local society. In many counties, especially those located in mountainous regions, if it were not for the undergraduates, there would be no societies, and as an instance, he pointed to Montgomery county as having only four graduates. There is only one county in Texas that does not admit them, and that society is not flourishing. He regarded a diploma as merely a certificate of honor, and since the establishment of a State Board of Examiners, only a certificate of having passed a successful examination entitles one to register as a legal practitioner, practicing on a diploma being a relic of the past.

Dr. Poyner, of Berryville, believed that some qualification should be demanded of the undergraduate, say for instance, the attendance of

at least two years in a reputable medical college, and to require less, would be a step backward.

Dr. Stephenson in closing the discussion referred to a resolution he made many years ago while practicing as an undergraduate, namely, that he would never let an opportunity pass to lend a helping hand to an undergraduate when help was needed, and this is an opportunity to show the gratitude he felt for the inspiration he received to complete his medical education while under the influence of a local society. He decried the idea of an approaching crisis in the affairs of this society, for in the states where undergraduates were admitted, organized medicine was strengthened thereby. He had confidence in the wisdom of those who had met in the National House of Delegates, and recommended this Section for the adoption of state and county societies. He referred to Kansas, Missouri and Texas as states that had admitted them, and personal reports received substantiated the contention that only good results could follow their admission. The only society in Texas not in growing condition, was the one which had steadfastly refused them admittance. Kentucky, the paragon of states from the standpoint of ideal medical organization, has long admitted them, and when Kentucky leads, Arkansas can afford to follow.

He stated that if every undergraduate in the state was a member of the Society, it would be no trouble to secure needed medical legislation, and the defeat of the Black-Patterson bill may be attributed to those doctors without the ranks of organized medicine, and the Retail Druggists' Association. In contending for the adoption of this section, he did not mean to aver that every undergraduate was reputable and should be admitted into the Society, but reminded the members that not a single safeguard was taken away from the county society, and as many disreputable graduates are debarred, so should undergraduates of bad character. The matter of admission was still left entirely in the hands of the local society. In conclusion he said: "It is an admitted fact that we have the undergraduate with us, and he must be reckoned with. We meet him in

consultation and mingle with him socially. He is also our competitor and confrere; he is our neighbor and friend. Then what is the reason we can not admit him to full membership in our Societies?" (Applause)

The president put the motion, and it failed to carry, the vote standing, ayes, 11, and naves 19, whereupon Dr. Vinsonhaler, of Little Rock, moved the adoption of the original section, which was carried. On motion of Dr. Lawrence, of Batesville, the Constitution and By-Laws was adopted as a whole.

The Secretary read an application for a charter from Sharp county which was ordered granted.

On motion adjournment was had until Friday morning.

Fourth Day—Morning Session.

The House of Delegates met at 8:30 o'clock, Friday morning with President Drennen in the chair.

REPORT OF AUDITING COMMITTEE.

Dr. W. C. Dunaway, Chairman, read the following report:

We, your Committee, appointed to examine the records, books, etc., and audit the accounts of the Secretary and Treasurer, beg to say, that after a careful examination we find the items, accounts and statements contained therein to be as represented, and the thanks of the Society are due these two efficient officers for their services.

Respectively submitted,

W. C. DUNAWAY, Chairman.

L. KIRBY,

WILLIAM BREATHWIT.

On motion the report was adopted and the Committee discharged.

REPORT OF NOMINATING COMMITTEE.

The Nominating Committee met Tuesday morning and organized by electing Dr. Mat S. Dibrell, Chairman, and Dr. Vernon MacCammon, Secretary. The following Delegates were selected to compose the committee:

Drs. A. B. McKinney, Corning; W. B. Lawrence, Batesville; Vernon MacCammon, Arkansas City; H. H. Neihuss, Wesson; F. T. Isbell, Horatio; F. W. Jelks, Hot Springs; E. R. Dibrell, Little Rock; J. J. Morrow, Cotter; M. S. Dibrell, Van Buren.

On motion the Committee adjourned.

On Friday the Committee met with all members present.

A resolution was passed declaring all offices vacant on account of the adoption of the new Constitution and By-Laws. The following names were recommended:

President: Drs. J. T. Clegg, Siloam Springs; C. C. Stephenson, Little Rock, and W. A. Brown, Monticello.

First Vice-President: Dr. M. Fink, Helena.

Second Vice-President: Dr. J. L. Butler, Sheridan.

Third Vice-President: Dr. C. D. Stephens, Magnolia.

Secretary: Dr. Morgan Smith, Little Rock.

Treasurer: Dr. J. W. Scales.

Councilor First District: J. E. Hughes, Walnut Ridge.

Councilor Second District: J. M. Jelks, Searcy.

Councilor Third District: W. H. Deadrick, Marianna.

Councilor Fourth District: B. D. Luck, Pine Bluff.

Councilor Fifth District: J. T. Henry, Eagle Mills.

Councilor Sixth District: R. H. T. Mann, Texarkana.

Councilor Seventh District: J. C. Wallace, Arkadelphia.

Councilor Eighth District: J. S. Westerfield, Conway.

Councilor Ninth District, Sam G. Daniells, Marshall.

Councilor Tenth District: C. E. Hurley, Bentonville.

Delegates to American Medical Association: E. K. Williams, Arkadelphia, 1 year; Adam Guthrie, Prescott, 2 years. First Alternate, Dr. William Cruther, Pine Bluff, 1 year; Second, Dr. C. E. Hurley, Bentonville, 2 years. Second Alternates, Dr. H. A. Longino, Magnolia; Dr. J. W. Meek, Camden.

SECTIONAL OFFICERS.

Section on Practice: Dr. H. Tibault, Scott, Chairman; Dr. C. J. March, Fordyce, Secretary.

Section on Surgery: Dr. A. G. Dickson, Paragould, Chairman; Dr. H. H. Rightor, Helena, Secretary.

Section on Obstetrics and Gynecology: Dr. C. P. Merriwether, Little Rock, Chairman; Dr. W. E. Lindsey, DeQueen, Secretary.

Section on Dermatology and Syphilology: Dr. A. U. Williams, Hot Springs, Chairman; Dr. A. A. Evans, Betheseda, Secretary.

Section on Pathology: Dr. W. S. Stewart, Chairman, Pine Bluff; Dr. C. P. Glover, Pine Bluff, Secretary.

Section on State Medicine and Public Hygiene: Dr. J. P. Sheppard, Chairman, Little Rock; Dr. Oscar Gray, Little Rock, Secretary.

Section on Diseases of Children: Dr. H. P. Routh, Fort Smith, Chairman; Dr. N. S. Word, Camden, Secretary.

Upon the presentation of the report, Dr. Frank Vinsonhaler, Little Rock, moved its adoption except with reference to President, as the candidates for that office would have to be voted for. (Carried.)

Accordingly, balloting was begun, and resulted in the election of Dr. C. C. Stephenson, Little Rock. A motion to declare him the unanimous choice was adopted without dissent.

The President appointed Drs. Clegg and Brown to escort the newly elected President to the chair, and in presenting him to the Society, said:

"Dr. Stephenson certainly needs no introduction at my hands, he is too well known. It is a great pleasure to me this morning to occupy this position. I know I voice the sentiment of every one here when I say he has made one of the best Secretaries this Society has ever had. Now, if he will do just half as well as President he will do a great deal in his present position. I take pleasure in introducing Dr. Stephenson, the President-elect. (Applause).

The General Session was called to order and Dr. Stephenson spoke as follows:

Gentlemen of the Society, I shall not attempt to make a speech to you, for I do not think it necessary. In fact, I do not want to take up your time. It is useless to say that I thank you all for the honor you have conferred upon me. I feel like you all have made a prescription this morning. I am the medicine and you are the patient. You know that doctors insist upon patients taking their own medicine; so if I am a bad dose, you will have to take me just the same. I am going to do the best I possibly can. I only hope and only trust that I can leave the President's chair with as much honor as my worthy predecessor, Dr. Drennen, has left it. I thank you. (Applause).

The General Session was adjourned and the House of Delegates called to order.

Dr. Canfield, Siloam Springs, called attention to the disadvantage of having two important sections like those of "Practice" and "Sur-

gery" meeting at the same time, and made a motion that the matter be reconsidered. The motion prevailed, and a motion instructing the Committee on Scientific Work to classify all papers as their titles suggest into two sections, namely, Practice of Medicine and Surgery, and that the program be so arranged that the two sections meet at different times, was carried.

REPORT OF COMMITTEE ON PRIVILEGED COMMUNICATIONS.

The Committee on Privileged Communications reported as follows:

The Committee to whom was referred the statement of Dr. Gibson concerning the appointment of Medical Examiner of Fifth Congressional District, same being made to fill the vacancy caused by the resignation of Dr. Runyan, beg leave to report that said appointment by the Governor was not in accordance with existing law.

We insist that the law governing same be enforced to the letter, viz: that where a vacancy on the State Board occurs that the Governor shall make his appointment from the list furnished by the Arkansas Medical Society.

M. FINK,
F. W. JELKS,

REPORT OF COMMITTEE ON NECROLOGY.

This report was read by title and was adopted.

The great events of life are birth and death. Not only for the actor, but for all the observers as well.

Who does not feel the uplifting influences of joy and hope, when he sees a new born soul enter into the world? Who can refrain from sad reflection when he sees that same soul depart, whither no man knows? In the presence of death we are grieved and overwhelmed by the sense of loss. Some loved one has gone to return no more. We shed tears—but in an instant there is imaged, before our vision, the living man, not the dead. We see again the strong hand that toiled for us. We see the kind face that has smiled on us. We hear the gentle voice that has counselled us. Our memory is full of his heroic deeds, of his self-sacrifice and toil; of his charity and gentleness; of the things he loved, and the things he hated. According to universal experience our memory dwells not long on evil, in the presence of death. Good deeds impress themselves upon us.

Thus death lifts us up. It teaches us charity and makes us better. It leads us to contemplate virtue. It stimulates us with a desire to attain

what is good, and brings achievement nearer. The lives of our departed friends are beacon lights gleaming out over dark and tempestuous seas, and if we will but follow them, we shall not be cast upon the rocks.

Your committee has endeavored to collect information concerning all members, deceased during the past year. In some instances we have failed to get any except very meager data, in others we are more fortunate.

The list embraces sixteen names, the largest recorded in recent years, if not in the history of our society.

DR. JOHN W. McCONNELL.

Dr. John W. McConnell, of Sebastian County; died at Booneville, Ark., November 26th, 1906. He was born at Mainsville, Mo., December 28th, 1855, but was soon brought by his parents to Arkansas. He attended the Cane Hill College in Washington County, and was married to Miss Sarah McNabb, January 23, 1879. He graduated from the University of Arkansas, Medical Department in 1884, and practiced in Hackett City, Sebastian County until 1887, then in Huntington, Sebastian County, until 1904. Later in Booneville, Logan County, until his death. He held many positions of trust during his life time, and was known only to be loved.

He was a successful physician, held universally in high esteem by his confreres, and respected by the entire community in which he lived. For many years he had been an active member of both the County and State Societies.

DR. J. P. FLETCHER.

Dr. J. P. Fletcher died at Lonoke, March 9, 1907, in his 80th year. He had been ill for two or three weeks with pneumonia, making a fight for his life, unusually gallant for a man of his extreme age.

Dr. Fletcher received his first license to practice medicine in 1867 in Alabama. He removed to Lonoke, this State, in 1872, and practiced continuously until his death, excepting for a time spent in college. He graduated in 1875 from the Charity Hospital College of Medicine at New Orleans; La., and was one of the most esteemed members of the Lonoke County Medical Society.

DR. W. M. BITTINGER.

Dr. W. M. Bittinger, a member of the Lincoln County Medical Society, died at his home in Grady, November 14, 1906. His death was due to heart disease. He was born in Iowa in 1854 and graduated from the medical department of the University of Iowa in 1882.

DR. J. S. CORN.

Dr. J. S. Corn was a member of the Howard County Medical Society and a resident of Nash-

vile. He was 57 years of age and in apparent good health when out on a camp hunt, about 25 or 30 miles from home. He complained a little on the night of the 3d, and on the morning of the 4th of April, 1907, started out from camp and became violently ill. He died while walking down the bank of the river. Dr. Corn was a graduate of Vanderbilt University (Medical Department), Class 1880. He had been identified with the Arkansas Medical Society many years, and will be sadly missed, as he was always punctual and took an active interest in organized medicine. He was one of nature's noble men.

He was a son of Dr. B. W. Corn, of Lonoke, who was prominent in the Arkansas Medical Society many years ago, but who died only recently in his 84th year at Lonoke.

DR. E. D. LAWThER.

Dr. E. D. Lawther died February 23, 1907, of pneumonia at Hollywood, Ark. He was 35 years of age, and a member of the Clark County Medical Society. Other data concerning this brother is not at hand for this report.

DR. WM. T. NORCOTT.

Dr. Wm. T. Norcott was born in Tennessee in 1850 and died June 6, 1906. He graduated in medicine at Memphis in 1886, and was a member of the Cleveland County Medical Society at the time of his death.

DR. W. F. NOE.

Dr. W. F. Noe was shot and killed February 8, 1907, by a man, with whom there had been a previous dispute. Dr. Noe was 37 years old, was reared in Izard County, Ark., and graduated from the Barnes Medical College, St. Louis, Mo. He was a member of the Baxter County Medical Society, and enjoyed a large practice.

DR. FRANCIS NOEL BURKE.

Dr. Francis Noel Burke was born December 25, 1828, at Westport, County Mayo, Ireland. Died January 27, 1906. He received his literary education in Ireland and emigrated to the United States in 1857. He graduated from the Eclectic Medical College of Cincinnati and began the practice of medicine shortly before the outbreak of the Civil war. He entered the service of the United States, and served as surgeon throughout the war, and was honorably discharged September 4, 1865, having been breveted Lieutenant-Colonel, U. S. A., June 1, 1865, for "Faithful and meritorious service during the war." In 1863 he married Miss Eva Coolidge, of Helena, Ark. After his discharge he practiced medicine in Helena and was an honored member of the Philips County Medical Society at the time of his death.

No fitter tribute could have been paid to his life and character than that which appeared in an editorial in the "Daily World" of Helena on the day following his funeral, and which is in substance as follows: "He was a resident of Helena for a great many years and a better citizen and man never lived in the city. He was a physician of the highest repute, and enjoyed a large practice. He was a man of fine character, generous to a fault, and the amount of his charity work would perhaps have amounted to many thousands of dollars had it been summed up in dollars and cents. He was a good man with a higher and nobler object in life than the mere accumulation of wealth. He was ever ready to respond to the call of the sick, whether they were poor or rich, and in many a home his name was held in reverence as a benefactor. He loved his profession and practiced medicine for the good he could accomplish in this world. His devotion to his work was the ruling passion of his life. But Dr. Burke was more than a great physician of the body, he did heart work; he relieved the pains of poverty and on his tombstone should be inscribed the words: "A Benefactor of Mankind."

DR. B. H. CAVITT.

Another death of this year (date not given by correspondent), is that of Dr. B. H. Cavitt of Hoxie, Ark. He was a graduate of the Barnes Medical College of St. Louis, Mo., class 1903. After graduation he located at Hoxie, and became local surgeon for the St. L. I. M. & S. R. R., and otherwise built up an extensive practice. He married just a short time before his death, which took place at the Missouri Pacific Hospital, St. Louis, from typhoid fever.

He was a member of the Lawrence County Medical Society.

DR. JOHN H. WESTERFIELD.

Dr. John H. Westerfield, was born in Laurel County, Ky., April 30, 1844, and removed to Barbourville, Knox Co., Ky., with his parents while he was yet a small boy.

He received his early education in the public schools.

His father and grandfather were both physicians, as were also many other relations of the name.

After engaging in teaching for a while he took up the study of medicine with his father and graduated from the University of Louisville in 1871. Immediately after the graduation he began practice at Barbourville, soon established a good practice and gained a reputation as a surgeon. It is said that he did the first lithotomy ever performed by a local surgeon in his section of the State.

In 1872 he located at Springfield, Ark., where he continued to practice until 1894, when he went to Atkins, Pope County.

He took active interest in his chosen profession and was president of the Pope County Medical Society at the time of his death.

Though having obtained only a common school education he possessed rare mental ability—a mind quick and retentive, and peculiarly adapted to his calling.

Though firm in his convictions, through his natural, congenial and sympathetic disposition he made and retained a host of friends wherever he went.

After a month's illness he died at his home in Atkins, August 31, 1906.

DR. JAMES HAMILTON MYERS.

Dr. James Hamilton Myers was born in Morton, Mississippi, October 22, 1856, but was reared in Texas. He died at Black Rock, Arkansas, March 14, 1906, from injuries received by his horse backing his buggy off a bridge, while on the way to see some patients at Portia. Dr. Myers graduated from the Vanderbilt University, (Medical Department at Nashville, Tenn., 1883. He attended post graduate schools in St. Louis, Louisville, and New Orleans. At one time he represented his county in the Arkansas State Legislature. He was a member of the Lawrence County Medical Society.

DR. JNO. P. MITCHELL.

Was born July 24, 1834, in Virginia; graduated from Jefferson Medical College in 1858. Came to Arkansas in 1859. Enlisted in the Confederate Army in 1861, as a Lieutenant, but was transferred to the medical department in 1862, where he served as a surgeon to the end of the war, returning to Clarksville in 1865. Failing vitality had kept him out of active practice since 1904, and he died July 27, 1906.

DR. A. R. BILLS.

Dr. A. R. Bills was born in Bourbon County, Ky., June 12, 1850. Graduated from the University of Kansas City and located at Maysville, in 1882. Came to Sulphur Springs, in 1889, where he departed this life May 23, 1906.

Dr. Bills was an honored and useful physician, and probably the oldest in his part of the State.

He was a member of the Benton County Medical Society, by whose members, his services, contributions and counsel are held in gratified remembrance.

DR. L. B. MITCHELL.

Dr. L. B. Mitchell, an old and highly respected physician at Brinkley, died November 7.

He lived several years in Austin, Ark. He was at the time of his death, commander of the Pat Cleburne Camp No. 537, U. C. V. He leaves many relatives to mourn his death. He was buried with Masonic honors.

Dr. Mitchell was a member of the Monroe County Medical Society.

DR. W. F. WILLIAMS.

Dr. Wylie F. Williams, aged 56 years, a leading physician of Des Arc, died September 7, from a stroke of apoplexy. Dr. Williams was in his usual health, attended church and made two or three professional calls. At 2 o'clock he got up to give Mrs. Williams who was ill, a dose of medicine, when he was seized with the stroke, and only lived till 5 o'clock.

Dr. Williams was a member of the United States Pension Examining Board, and of the Prairie County Medical Society. He is survived by his widow and three sons.

DR. JOHN W. BREEDLOVE.

Dr. John W. Breedlove died at Fort Smith, August 16, 1906. He was born at New Orleans, La., June 26, 1827, of wealthy and influential parents. He received a liberal classical education, graduating in 1845 from the University of Nashville, Tenn. His earlier years of study had been passed in a French school near New Orleans, where he became proficient in the use of the most polite language in the world. He graduated in 1849, from the Medical Department of the University of Louisiana and became Assistant Surgeon at the Marine Hospital in New Orleans. During the late war he served the Confederacy well, becoming the chief medical officer on the staff of General Jno. C. Breckenridge. It is related that after the defeat at the battle of Shiloh, when he was urged to avail himself of an opportunity of safe retreat, he replied that it seemed to be his duty to remain and care for his wounded comrades, and that he remained, and became a prisoner, though well treated and soon released. Soon after the war he removed with his family to Greenwood, Sebastian County, Arkansas, where he practiced his profession till the early nineties, when he removed to Fort Smith, where he remained till he died in his 79th year.

Dr. Breedlove was a scholar of the first rank. He was a gentleman of the highest type of the old school. His honor was unassailable. His manner was courteous, affable, and unassuming, in the presence of rich and poor alike.

He never spoke unkindly of a fellow physician, yet no sham could stand before him. Whether in prosperity or in adversity he was always the same good man, whose memory will ever be an inspiration to those who knew him in life.

DR. H. W. TERRY.

Since this report was written knowledge has come to us of the death of Dr. H. W. Terry at Wewoka, Oklahoma. He was a resident of DeVall's Bluff, Ark., and a member of the Prairie County Medical Society. He was a graduate of the Memphis Hospital Medical College at Memphis, Tenn., a local surgeon of the C. R. I. & P. R. R. He died October 28, 1906.

H. MOULTON, Chairman,
L. KIRBY,
J. W. SCALES.

STATE BOARD OF MEDICAL EXAMINERS.

The following were recommended for appointment on the State Board:

Fourth District: Dr. M. L. Norwood, Lockesburg; Dr. Geo. T. Hines, Fort Smith; Dr. J. S. Shibley, Paris.

First District: Dr. T. B. Bradford, Cotton Plant; Dr. M. Fink, Helena; Dr. B. L. Harrison, Jonesboro.

Fifth District: Dr. G. S. Brown, Conway; Dr. L. P. Gibson, Little Rock; Dr. R. J. Adams, Morrilton.

DISPOSITION OF BOOKS.

The Secretary reported the accumulation of many medical books that had been sent the Journal for review, and asked what disposition should be made of them. On motion of Dr. MacCammon, Arkansas City, the books were donated to the Secretary in recognition of his services as editor of the Journal.

Hon Mr. Black, leader in the House of the Black-Patterson Patent Medicine Bill, was accorded the privileges of the floor, and in a strong and eloquent speech, reviewed the history of the fierce struggle which was recently made to pass the bill. He was optimistic that the next Legislature would pass a similar bill, and although he will not himself be a member of the next Assembly, pledged his support to the profession in their crusade to "wipe out of existence the great American Fraud."

RESOLUTION OF THANKS.

Dr. Leonidas Kirby, of Harrison, introduced the following resolution which was unanimously passed:

Whereas, the Pulaski County Medical Society and the citizens of this city have been uni-

formly energetic in their efforts to provide entertainment and comforts for the Arkansas Medical Society, and

Whereas, As guests of the Little Rock Board of Trade the most magnanimous hospitality has been extended; be it

Resolved, That this Society wishes to express its high appreciation of the courtesies shown by the Acting Mayor, citizens, ladies, Board of Trade, Mr. Letton, of the Hotel Marion, and the railroads, assuring them that their contributions have made this the most successful meeting in our history.

Dr. E. Meek, Argenta, presented the following resolution, which was passed.

Whereas, Article 7 of the Constitution of the American Medical Association provides for the organization of District Medical Societies, and

Whereas, The States of Arkansas, Texas, Missouri, Kansas and Oklahoma, have perfected an organization known as the Medical Association of the Southwest, and which held its first meeting in October, 1906; be it

Resolved, That the delegats from this Society to the American Medical Association be instructed to use their influence toward having this Association officially recognized.

The resolution was adopted.

A motion by Dr. Neihuss, Wesson, to consider the fee for making life insurance examinations, was deferred to the afternoon meeting, but was never revived.

The Councilors were voted the usual honorarium of \$25.00 each, and the salary of the Secretary fixed at \$600.00 annually.

On motion, the House of Delegates adjourned until five o'clock.

FOURTH DAY—AFTERNOON SESSION.

The House of Delegates met at five o'clock, pursuant to adjournment, President Drennen presiding.

VOTE OF THANKS TO MESSRS BLACK AND PATTERSON.

Dr. Eberle, Fort Smith, introduced the following resolution:

Resolved, That in the interest of the people of Arkansas, the Arkansas State Medical Society, extends its sincere appreciation of the efforts of Senator Patterson, of Woodruff, and Representative Black, of Marion, for their able efforts in defense of the Black-Patterson Patent Medicine Bill.

REPORT OF COUNCILORS.

Dr. Fink, Secretary of the Council, submitted the following report, which was adopted without being read:

To the President and Members of the Arkansas Medical Society:

Gentlemen:—The annual report of the Councilors is submitted below, as follows:

The First Councilor District has six counties well organized, and two counties without organizations. This is the same condition as existed last year; but the six counties are in better working condition, have better societies and more members than they had a year ago, some have no more members, some have less members than a year ago; but as a whole the organizations have an increased membership and a fine interest exists so far as I have been able to learn. I have visited five of the six organized counties during the year and had an appointment to visit the other, but was sick at the time. I have attempted twice this year to organize Crittenden County Society, but have failed to get any of the district to meet, yet they have promised to organize in the near future. I recommended to my successor that Crittenden and Poinsett Counties be organized. I think Dr. McCormack's lecture has done much good to the organizations in my district.

Respectfully,

G. A. WARREN, Councilor.

When elected Councilor for the Second District one year ago, I found there was very little interest in medical organization in this district. I was much disappointed to find so little interest evinced by some of the counties composing the district. White-Cleburne has a fairly good working society. Jackson and Independence have also good working societies. Sharp County was organized last year about the first of May, but am unable to report its progress. Izard and Fulton Counties have no local organization and I am fully persuaded that they do not feel sufficient interest to organize one. I have tried in every way possible to get in communication with the leading physicians of both counties and offered to go at any time that they would designate and assist them in every way possible, but my efforts have not been rewarded with a single response. On November 1, 1906, I called a meeting at Newport for the purpose of organizing the Second Councilor District Medical Society. The White-Cleburne and Jackson physicians were the only ones present, notwithstanding my previous efforts to secure their attendance. However, we had a very interesting and profitable meeting. On April 4, 1907, the District Society met at Searcy with a very good attendance. Doctor McCormack being pres-

ent, delivered a very able and instructive lecture, and all went away feeling fully repaid for the time they had spent in society work. I wish to say that during the coming year I intend to visit every county in the District if it is possible for me to do so, and I hope to be able to report a good working society in every county in the District at our next annual meeting.

Respectfully submitted,

J. M. JELKS, M. D.,

Councilor Second District.

The Third Councilor District has eight organized medical societies, which, with one or two exceptions, are not only keeping up an organization, but are doing good work in the betterment of the profession and the enlightenment of the laity in their respective committees.

The total membership of the district for the year taking into account losses by death, suspensions and removals, is the same as last year.

Some of the societies have taken an active part in medical legislation, notably Lee, Monroe and Phillips County Societies.

Their meetings, as a rule, have been regularly held, well attended, papers read and freely discussed with benefit to all concerned.

They are exerting an influence in their respective localities along medical lines, such as sanitation, legislation, etc. The District Society, composed of the component county societies of the Councilor District has held two meetings during the year, the last at Brinkley, which being a McCormack meeting, as anticipated, proved most interesting, entertaining and instructive to physicians and laymen.

In his talk to the District Society, Dr McCormack laid stress on the benefits to be derived from a post-graduate program by county societies, and made valuable suggestions in the manner of making such a course practicable and of great value to the members.

Some of the societies had already adopted the idea, probably others will fall into line during the coming year.

Respectfully submitted,

M. FINK,

Councilor Third District.

The Fourth Councilor District is composed of the following counties: Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln.

In each county there is a good county organization with practically all of the eligibles as members. I have not visited all of the societies as they seem to be working harmoniously and I felt that it would be impossible for me to stir up any more enthusiasm. I expect to visit each society before the end of the year.

We have a well organized District Society with

a fairly good attendance, last meeting in Monticello in December. We are indebted to Dr. J. N. McCormack of Kentucky, for a very able address which no doubt will be productive of great good. Jefferson County Medical Society has taken steps towards organizing a Post Graduate School.

Very respectfully,

B. D. LUCK,

Councilor Fourth District.

I beg to submit to you the following report:

There is a medical society in each county in my District, the Sixth, save Howard and Pike, which have a joint society.

During the year I have made a visit to each society in the district except the Howard-Pike society. Two efforts have been made to visit this society, but delayed trains prevented my getting there.

In the counties of Sevier and Miller the membership is large. Almost every eligible member in these counties is a member of the societies. The Nevada County Medical Society is well organized and the meetings are interesting and enthusiastic. The membership of this society, however, is not what it should be.

Polk County is organized but the meetings are not as enthusiastic as we would like. There has been some friction among the physicians of Polk County, which we hope to see overcome within the next year or two.

There is an organization in Hempstead County, but I am sorry to say that the meetings are not held at regular intervals and I feel that the society is not accomplishing a great amount of good. I made two visits to this society during the year. It is a rich county with nearly fifty physicians and ought to be made one of the banner counties of the State.

The Little River County Society has been greatly handicapped by not being able to admit non-graduates to its membership, as they greatly predominate in this county. There are some faithful workers in Little River and we hope to see them have a splendid organization. It will take much work on the part of the individual members of the county societies comprising this district to put organized medicine on the basis which it deserves. It will also take time.

A district society was organized in Texarkana on March 18. We hope this will help stimulate the work.

At the organization of this society a set of resolutions was introduced, endorsing the faithful work of Dr. Norwood, one of the examiners of the State Medical Board of the Arkansas Medical Society.

During the year the district has lost by death one of its most faithful members, Dr. J. S. Corn,

of Nashville. Organized medicine had no better friend, more faithful or conscientious worker than Dr. Corn. He was a true man and an honor to the profession.

I wish to express my thanks to the members of the various county societies of the district for the many courtesies shown me during the year.

Respectfully,

R. H. T. MANN,

Councilor for Sixth District.

The Eighth Councilor District, embracing the counties of Conway, Faulkner, Johnson, Perry, Pope, Pulaski and Yell each has a duly organized medical society in affiliation with the Arkansas Medical Society.

Since last meeting I have visited county societies as follows: The Yell County Medical Society, October 6, 1906; the Pope County Medical Society, March 21; the Conway Medical Society, April 18, and the Johnson County Medical Society, May 6, 1907. I have visited most of the meetings of the Faulkner County Medical Society. I have not visited either the Pulaski or the Perry County Societies. The former has the largest membership of any in the district, and I am creditably informed they are doing splendid work. Perry County has only a membership of four, last report.

I met a good attendance at the places visited. At most of the meetings a programme was carried out, papers read and discussed. At some of the meetings I noticed with pleasure that the younger physicians and recent graduates took active interest in the proceedings. In some places I heard some complaint as regards interest and attendance. There are yet, I am informed, quite a number of physicians eligible and desirable for membership who have so far failed to come in.

Some of the counties accept non-graduates as honorary members. In 1906 Conway County had enrolled 15, Faulkner 14, Johnson 18, Perry 4, Pope 12, Pulaski 69, Yell 16, practically the same as the year before. What the returns this year will show, I have as yet had no opportunity of learning, but possibly there will be found no very decided growth.

While it must be admitted that in some places at least the zeal that ought to be desired has not been attained, when we remember that only five or six years ago the profession in this territory, outside of, perhaps, two counties, had practically no organization, the outlook seems to me fairly hopeful.

I have to report that the officers of the District Society have been derelict in duty and that no meeting has been held during the year.

Respectfully submitted,

J. S. WESTFIELD,

Councilor Eighth District.

Report of the Ninth Councilor District.

There have been many things this year to interfere with the work of the Ninth District. Early in the year our President, Dr. Evans of Harrison, Ark., moved out of the State. I was sick most of the time and while I tried in every way to keep before the members of the different county societies the fact that organized medicine must be the paramount question, I realize that we must continue in the good work in order to accomplish the desired end.

I still have two counties in the Ninth District that have no county societies, viz.: Stone and Van Buren Counties. I hope my successor will be more fortunate than I have been in organizing said counties.

J. B. BOLTON,
Councilor Ninth District.

An effort here was made by Dr. Hall, of Pocahontas, to reconsider the action taken by the Society with reference to undergraduates, but the President ruled that he could not do so as he voted against the motion.

PROPOSED AMENDMENT TO BY-LAWS.

Dr. F. W. Jelks, Hot Springs, introduced the following resolution, which lays over for one year:

Resolved, That all undergraduates who are now recognized as legal practitioners of Medicine in the State of Arkansas, are eligible to membership in this Society. That after the meeting of this Society in 1908, every candidate for membership in a County Society shall be required to present evidences of graduation from a medical college requiring a four years' course.

Dr. Mat S. Dibrell, Van Buren, reported the collection of dues from five undergraduates that had been admitted into the Crawford County Society. The money had been sent to and accepted by the Secretary of the State Society. He desired to know the status of these members, and what disposition should be made of the dues.

It was agreed that the Society had no right to collect dues from undergraduates, and a motion to remit them the amount they had paid, was carried.

EXPENSE ACCOUNT OF LEGISLATIVE COMMITTEE.

The Secretary presented an itemized account of expenses incurred by the Legislative Committee, the amount aggregating \$59.30 and

paid by Dr. O. L. Williamson, the Chairman. A motion to allow the bill, was carried.

A bill for \$2.00 for copying report of Councilors, was ordered paid.

THE JOURNAL.

Dr. Eberle, of Fort Smith, made a motion to discontinue publication of the Journal and return to the publication of the Bulletin and Transactions in book form as heretofore. Seconded by Dr. Witt, Little Rock.

Dr. Eberle said his county society was opposed to the publication of the Journal and he preferred the change as suggested.

Dr. Isabel stated that there was dissatisfaction in his county with regard to the Journal in bound form. They were pleased with it, but would like to have the bound Journal earlier in the year. He said he would like to see some arrangement made whereby an assessment could be levied so that each member could be assured of getting his bound volume. The amount charged for the bound volume was little enough, and in fact, too low.

Dr. Stephenson, Secretary, said that there was no reason why every member should not have a bound copy of the Journal, for the cost was a mere pittance, only sixty cents, the mere cost of binding. He said that eighteen states have state Journals, and to return to the Bulletin would be a step backward. The scope of a Bulletin is limited, while the character of material composing a Journal was more comprehensive. He said the Bulletin did not meet the demands of the profession. In conclusion, he said: "You have got organized medicine on one side, and the privately owned Journal on the other. One is upholding the nostrum; the other is fighting for clean medicine."

Dr. Hornor, of Helena, said his county society was in favor of continuing the Journal and he would vote against any movement to return to the Bulletin. He believed the state dues should be increased if necessary to continue the Journal.

Dr. Jordan, of Pine Bluff, asked Dr. Stephenson for information concerning the cost of the publication of the Journal as compared with the Bulletin. He favored the continuation even should it be necessary to raise the dues to meet the bills.

In answer to Dr. Jordan's inquiry, Dr. Stephenson stated that the cost of the bound Transactions and Bulletin was about \$1,400, and the cost of the Journal in its present enlarged form was but a few hundred dollars more. There is practically no difference in cost.

Dr. Dickson, of Paragould endorsed the Journal, and was well pleased with the arrangement of getting it bound at the end of the fiscal year at so small a cost.

Dr. Hall, of Pocahontas, expressed unqualified endorsement of the Journal, and favored its continued publication.

Dr. Eberle, of Fort Smith, said from the remarks that had been made, it was apparent that he was in the minority. The Secretary's statement regarding the Bulletin was hardly fair to the man. The Bulletin contained pithy, spicy news, and that was what he desired. His objection to the Journal, was that the papers were old before they appeared, and he would prefer to have them bound and sent out as soon after the meeting of the society as possible.

The motion made by Dr. Eberle failed to pass; there being but few dissenting votes.

PINE BLUFF WANTED THE NEXT MEETING.

Dr. Jordan, of Pine Bluff, brought an invitation from the Jefferson County Medical Society to meet at Pine Bluff next year, but owing to a delayed train, he was not able to reach Little Rock in time to present the invitation before the Committee. He notified the Society in advance that Pine Bluff would have the next meeting.

On motion, the House of Delegates adjourned *sine die*.

NEW MEMBERS OF THE AMERICAN MEDICAL ASSOCIATION FROM ARKANSAS.

Bailey, J. E. Huttig; Bright, D. W., Lewisville; Duncan, M. W., Bentonville; Hoover, A. S., Stamps; Miller, S. E. Dardanelle; Morris, J. W., Denton; Reed, C. C., Hensley; Thompson, H. M., Marvell; Tyner, H. V., Walcott; Wayne, J. R., Little Rock.

NEWS ITEMS.

Acting Governor Pindall has made the following appointments on the Examining Board of the Arkansas Medical Society:

First District, M. Fink, Helena; Fourth District, M. L. Norwood, Lockesburg (reappointed); Fifth District, Geo. S. Brown, Conway.

The Quarterly Meeting of the Examining Board of the Arkansas Medical Society will be held at Little Rock, July 11, 1907, F. T. Murphy, M. D., Brinkley, Secretary.

CHANGE OF ADDRESS.

Dr. D. E. Evans, from Cushman, to Bethesda, Ark.

Dr. R. H. Hodges, from Sulphur Rock, to Newark, Ark.

Dr. M. M. Evans, from Morgan Mills, to Millsaps, Tex.

APPOINTMENTS.

President Stephenson has appointed the following delegates to the National Irrigation Congress which convenes in Sacramento, Cal., September 2-7, 1907:

Dr. Dewell Gann, Benton; Dr. A. G. Clyne, Bethel; Dr. Mat S. Dibrell, Van Buren; Dr. C. H. Trotter, Helena; Dr. A. E. Cone, Portland.

Also the following committees:

Committee on Scientific Work, Dr. S. S. Stewart, Little Rock; Dr. W. A. Snodgrass, Little Rock; Dr. Morgan Smith, Secretary.

Committee on State Legislation and Public Policy, Dr. O. H. Williamson, Chairman, Marianna; Dr. Vernon MacCammon, Arkansas City; Dr. L. H. Hall, Pocahontas; Board of Visitors Arkansas University, Medical Department, M. Y. Pope, Monticello; W. N. Yates, Fayetteville; F. W. Youmans, Lewisville; H. Moulton, Fort Smith; A. C. Jordan, Pine Bluff.

DISTRICT AND COUNTY SOCIETIES.

HEMPSTEAD COUNTY MEDICAL SOCIETY met at Hope, on April 29, and elected the following officers: For President, J. R.

Autry; Secretary-Treasurer, Dr. W. A. Bryant; Vice-President, Dr. L. J. Gillespie.

ASHLEY COUNTY MEDICAL SOCIETY met at Montrose, April 17, Vice-President, J. W. Simpson in the chair. After the reading and adoption of the minutes of the last meeting, the following papers were read and discussed: Placenta Previa, by Dr. J. W. Simpson; Malarial Nephritis, by Dr. W. S. Norman; Syphilitic Iritis, by Dr. A. E. Cone; Dysentery, by Dr. E. M. Scott; Report of Cases, by Drs. Love and Harris.

The officers for the ensuing year are: President, Dr. J. W. Simpson, Hamburg; Vice-President, A. E. Cone, Portland; Sec-Treas., W. T. Lowe, Marvell.

Little Rock, Ark., May 20, 1907.

To the Editor:

Several days ago Dr. J. S. Westerfield, President of the Eighth Councilor District Medical Society, wrote asking me to act as secretary pro tem, as Dr. Jones had removed from the State.

The 5th semi-annual meeting was held at Clarksville, April 12, 1906.

We have had no meeting, since that time, owing to the multiplicity of society meetings, the rush of other business, and the lack of funds with which to defray necessary expenses. Out of the membership of the whole District, composed of Johnson, Faulkner, Perry, Pope, Pulaski and Yell counties, only 39 have contributed anything to the financial support of the society.

I have been the treasurer since 1904. The last money that has been paid in, was collected in October, 1905, and the last on hand checked out February 8, 1906.

Dr. Westerfield wrote me that we would have a meeting some time during the summer. I kindly ask those who have never contributed anything to please send me a check or money order for \$1.00, to cover dues for the past five years, and possibly to cover dues for the next five years.

S. P. VAUGHTER, Secretary.

502 1-2 Main St., Little Rock.

QUESTIONS ASKED ON EXAMINATION.

CRAWFORD COUNTY MEDICAL SOCIETY.

MAY 23.

MEETING AT MULBERRY.

1. Describe Hutchinson's teeth?
2. Name the complications of measles?
3. Describe Koplik's sign?
4. Should isolation always be practiced in measles?
5. Name the causes of vomiting?

6. Give five means of treatment of puerperal eclampsia?

7. What effect is produced by high altitude on the human economy?

8. What conditions may result from constipation?

9. Tell all you know about carbon bisulphid?

10. What are tactile corpuscles?

11. What is the function of the optic nerve?

12. What is the function of the third cranial nerve?

13. Differentiate Duchenne's disease from rheumatic arthritis?

14. Physiological action and medical properties of alcohol?

At the meeting of the Pulaski County Medical Society, May 27th, Dr. C. E. Witt read a paper on the "Management of Shock." The paper and the discussion which followed brought out all of the recent work which has been done in this line by Crile and others. Normal salt solution and adrenalin were the remedies which seemed to be the most universally popular.

At a meeting of the Pulaski County Medical Society, June 10th, Dr. Milton Vaughan read a paper on "Gunshot Wounds." The paper referred especially to gunshot wounds in military practice and specimens of bullets and cartridges used were exhibited. The modern military arms and the wounds produced by them were well discussed and some interesting statistics of the recent wars read.

QUESTIONS ASKED ON EXAMINATION AT THE QUARTERLY MEETING OF THE STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY, HELD AT LITTLE ROCK, APRIL 29, 1907.

PRACTICE.

Dr. M. L. Norwood, Lockesburg.

1. Describe and locate the pain in Appendicitis? Renal Calculus? Gall Stones? Give medical treatment in each condition.

2. Give period of incubation and one common complication or sequela that may occur in each of the following diseases: Scarletina? Rubeola? Pertussis? Epidemic barotitis? Varicella? Variola? Diphtheria?

3. Give symptoms and treatment in detail of a case of pernicious malaria (so called congestive chill)?

4. What is the clinical significance of the constant appearance in the urine of albumen? Of sugar?

5. Mention two frequent conditions in typhoid fever that are attended with collapse and indicate medical treatment in each instance?

SURGERY.

Dr. L. E. Love, Dardanelle.

1. Define Empyema. Give cause and treatment?
2. Give classification and treatment of ulcers.
3. Give pathology and treatment of erysipelas.
4. Give the symptoms of acute abscess and mention the regions most commonly affected.
5. Give diagnosis, pathology and treatment of acute specific urethritis.
6. Give etiology, pathology, and treatment of canglia.

ANATOMY.

Dr. MacCammon, Arkansas City.

1. Name the bones of the skull.
2. Describe the tenth rib.
3. Name the muscles attached to the patella.
4. Describe the mammary gland.
5. Name the contents of Hunter's canal.
6. Describe the pericardium.
7. Describe the trapezius muscle.
8. Name the branches of the anterior tibial artery?
9. Of what is the sympathetic nervous system composed?
10. Describe the salivary glands?

PHYSIOLOGY.

Dr. G. V. Poynor, Green Forest.

1. Name some of the symptoms following the removal of the thyroid body.
2. What is the physiologic treatment of myxedema?
3. Name the bile salts and give their functions.
4. Why does atropin cause dryness of the mouth, while pilocarpin provokes secretion of the salivary glands?
5. If heat is being continually produced within the body, why does not the temperature of the body continually rise?

CHEMISTRY.

Dr. J. W. Meek, Camden.

1. Into what two grand divisions is chemistry divided?
2. What is meant by the term reaction in a chemical sense?
3. Is the blood of a living human being acid or alkaline?
4. What is the difference between potassium and potassa?
5. Give two preparations made from Potassium that are commonly used as medicines?
6. What is, in a chemical sense, an element?
7. Is Iodine an element or a compound?

8. Name two iodine preparations used as therapeutical Agents?

9. Is water an element or a compound?
10. Of what is hydrochloric acid composed?
11. What office in the human economy does hydrochloric acid perform?
12. Give the chemical composition of water?

MATERIA MEDICA AND THERAPEUTICS.

Dr. Murphy, Brinkley.

1. Name four classes of medicine and give an example of each class? Give dose of example?
2. Name what you would consider four of the best cholagogues?
3. In what two principal ways do diuretics act?
4. Name two classes of diuretics and describe their action?
5. Cinchona bark contains how many natural alkaloids? How many of said alkaloids are official? Name them?
6. What is meant by Normal Salt Solution. How is it prepared and in what ways may it be administered?
7. Give the therapeutic uses of sodium salicylate?
8. How would you treat a case of poisoning by corrosive sublimate?
9. Explain the incompatibility of strychnine, sulphate and potassium iodide in solutions.
10. Write a complete prescription that would be applicable in an ordinary case of acute rheumatism?

OBSTETRICS.

B. L. Harrison, M. D.

1. In which one of the female generative organs does conception usually take place?
2. Name the foetal membranes?
3. What is the liquor amnii? Give its function?
4. In what period of pregnancy are the foetal heart sounds first heard?
5. Define abortion? Miscarriage? Premature labor?
6. What is mole pregnancy? Give symptoms?
7. Enumerate the principal presentations?
8. Define the stages of labor, and state time of each?
9. Define post-partem hemorrhage? Define ante-partem hemorrhage?
10. What is meant by "puerperal period?" Give diagnosis?

MISCELLANEOUS NEWS.

The vacancy in the presidency of the well-known firm of Parke, Davis & Co., caused by the death of Theodore D. Buhl, has been filled by the election of the former vice president and secretary, Mr. Frank G. Ryan.

DEATHS.

JOHN ALLEN LOUGHRIDGE, M. D., Kentucky School of Medicine, 1891, a member of the Union County and Arkansas Medical Societies, died at his home in El Dorado, on April 29th, at the age of forty-one years. He located after graduation at Blanchard Springs, at which place he practiced three years before moving to El Dorado, the scene of his active professional life. Although a general practitioner of rare and peculiar skill, and remarkable diagnostic acumen, he possessed a knowledge of surgery that was wonderful, considering the limitations locality placed upon the scope of his labors. His peculiarity of manner was often misunderstood by those who casually knew him, but his heart was big and his nature refined and generous. He possessed more virtues than faults and did more good than evil; the balance should strike in his favor.

DR. CHARLES BERNAYS, of St. Louis, one of the most distinguished and widely-known surgeons of the Southwest, died of apoplexy, on the 22nd of May. He enjoyed a large professional acquaintance in Arkansas who will learn with deep regret of his sudden death.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY FOR 1907-08.

Dr. C. C. Stephenson, president, Little Rock; Dr. M. Fink, first vice president, Helena; Dr. J. L. Butler, second vice president, Sheridan; Dr. C. D. Stephens, third vice president, Magnolia; Dr. Morgan Smith, secretary, Little Rock; Dr. J. W. Scales, treasurer, Pine Bluff. For Councilor. First District, W. E. Hughes, Walnut Ridge, for two years; Second District, J. M. Jelks, Searcy, for one year; Third District, W. H. Deadrick, Marianna, for two years; Fourth District, B. D. Luck, Pine Bluff, for one year; Fifth District, J. T. Henry, Eagle Mills, for two years; Sixth District, R. H. T. Mann, Texarkana, for one year; Seventh District, J. C. Wallace, Arkadelphia, for two years; Eighth District, J. S. Westerfield, Conway, for one year; Ninth District, Sam G. Daniels, Marshall, for two years; Tenth District, C. E. Hurley, Bentonville, for one year.

Delegates to American Medical Association:

E. K. Williams, Arkadelphia, one year; Adam Guthrie, Prescott, two years;

First Alternate, Dr. Wm. Crutcher, Pine Bluff, for one year; C. E. Hurley, Bentonville, for two years.

Second Alternate, H. A. Laugino, Magnolia, one year; J. W. Meek, Camden, two years.

Section on Practice, H. Thibault, Scott, chairman; C. J. March, Fordyce, secretary.

Section on Surgery, A. G. Dickson, Paragould, chairman; H. H. Righter, Helena, secretary.

Section on Obstetrics and Gynecology, C. P. Meriweather, Little Rock, chairman; W. S. Lindsey, De Queen, secretary.

Section on Dermatology and Syphilology, Dr. A. W. Williams, Hot Springs, chairman; Dr. A. A. Evans, Bethesda, secretary.

Section on Pathology, W. S. Stewart, Pine Bluff, Chairman; C. D. Glover, Pine Bluff, secretary.

Section on State Medicine and Public Hygiene, J. P. Sheppard, Little Rock, chairman; Oscar Gray, Little Rock, secretary.

Section on Diseases of Children, H. P. Routh, Fort Smith, chairman; N. S. Word, Camden, secretary.

BOOK REVIEWS.

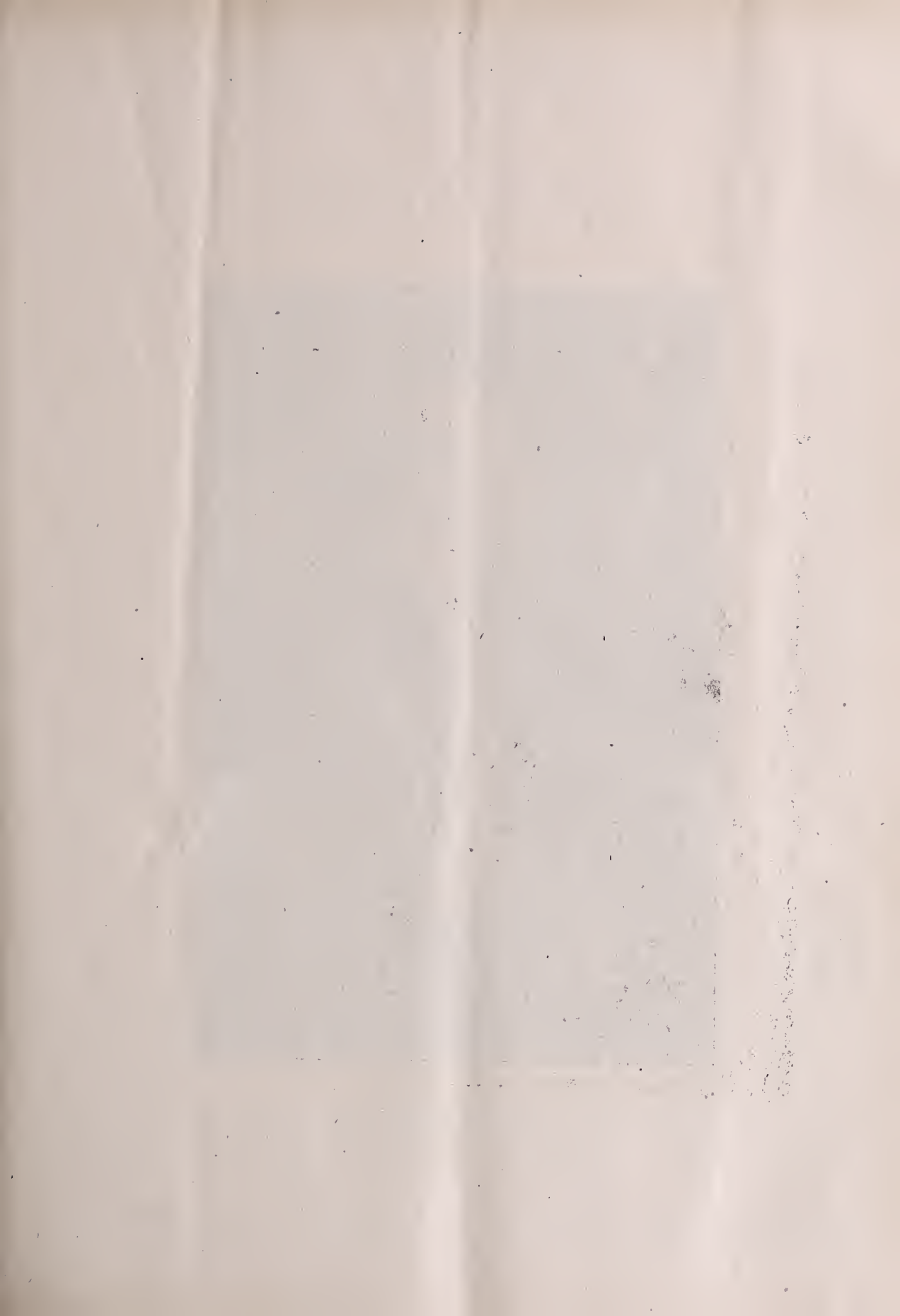
The following books have been received too late for review in this number, but proper notice will be given in the July issue:

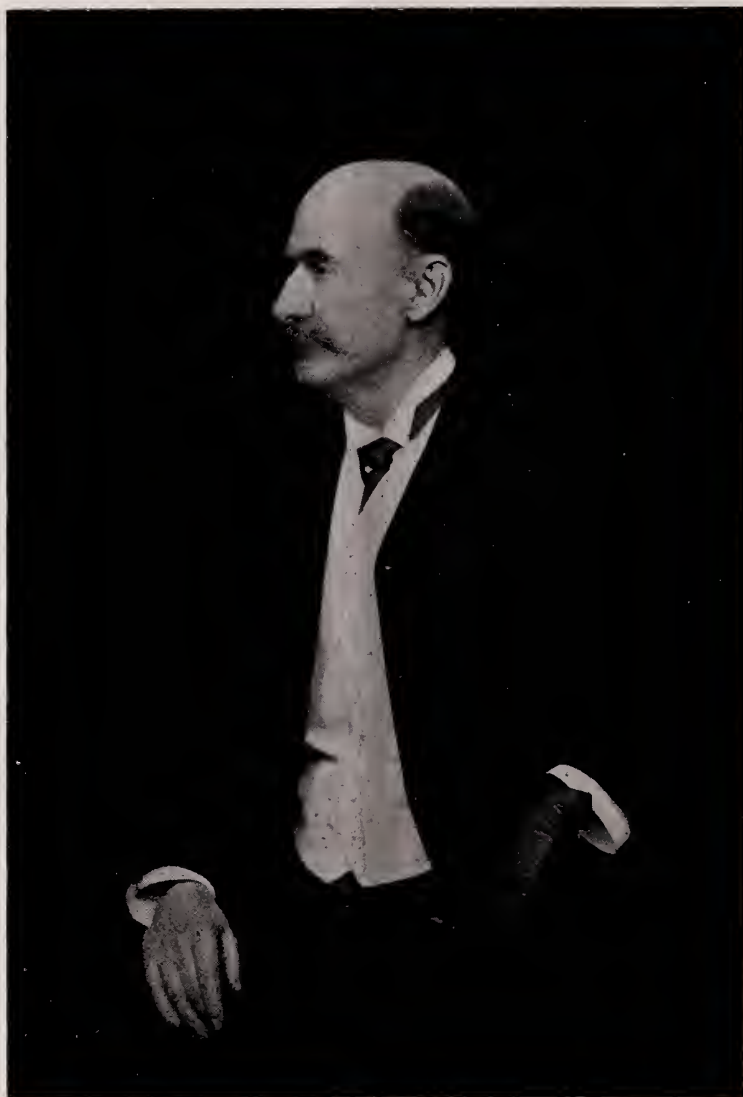
THE PRINCIPLES AND PRACTICE OF DERMATOLOGY.—By William Allen Pusey, A. M., M. D., Professor of Dermatology in the University of Illinois, etc., D. Appleton & Co., New York.

THE PRACTICE OF GYNECOLOGY.—By American Authors. Edited by J. Wesley Bovee, Professor of Gynecology, George Washington University, Washington, D. C., Lea Brothers & Co., Philadelphia and New York.

THE PHYSIOLOGICAL EFFECT OF THE WATERS OF THE HOT SPRINGS OF ARKANSAS.—By E. H. Martin, M. D., Hot Springs, Ark., Mississippi Medical Monthly, May, 1907.

THE PATHOGENESIS OF HEMOGLOBINURIC FEVER.—By William H. Deadrick, Marianna, Journal of the American Medical Association, June 1, 1907.





DR. JOHN WYETH
NEW YORK

Guest of Arkansas Medical Society, Annual Meeting, Little Rock, May, 1907

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NO 2.

Original Articles

THE PROBLEM OF NUTRITION IN GASTRIC ATONY.*

By Fenton B. Turck, M. D.,
Chicago, Ill.

Professor of Diseases of Stomach and Intestines,
Post-Graduate Medical School, Chicago.

The problem involved in atonic dilation of the stomach requires a very careful consideration of the pathology of atony, a clear and definite understanding of the factors involved, as well as a careful and complete recognition of the mechanics of the stomach and intestines, and also a thorough knowledge of the chemistry of dietetics, of the preparation and composition of food in general, and, lastly, as perfect a knowledge as we can obtain of the metabolism of the body.

In order that I may, in the short time allotted to me, make it clear, I will have to give you only the high-lights that have come as the result of laboratory research, combined with clinical observation. Before it is possible for one to conceive of a proper dietetic treatment of atony of the stomach and intestines, we must have a clear conception and a perfect understanding of the definition of atony itself. The word "atony" was first used by that superb medical writer, Todd, in 1847. Before that time, other terms were used to express the same idea. Atony simply means a relaxation, but it is an expression that is used wherever there is evidence of a lack of physiological peristaltic activity.

Whenever there is, at any time, an insufficiency of the stomach, it may be due to either of two conditions: one of which is known as pyloric obstruction, and the other which is due primarily to weakness of the muscle wall of the stomach. In obstruction we have not atony in the modern sense, not weakness of the muscle wall, but simply an inability to force out the contents because of mechanical obstruction. It is not my purpose to burden you with the factors concerned in

obstruction, because that is not a subject for our present consideration. But, however, many times the two conditions appear almost alike clinically. Sometimes it is difficult to differentiate in the diagnosis of one from the other.

Before I proceed any further, I must enter with you into a discussion of the physiology of the movements of the stomach. The movements are the result of a change of form of each involuntary muscle cell from an elongated condition to a round condition. These are followed by a relaxation and elongation of the muscle cell back to the original form. When the entire group of muscle cells in the muscular tunic of the stomach engage in this rythmical activity, we term it peristalsis. The right side of the stomach, or pyloric end, undergoes a rythmical motion by which the contents are forced through the pyloric orifice and that part which is not digested is forced back into the fundus, or the left side (cardia) of the stomach, the chemical portion of the stomach. In this fundus section of the stomach very few waves of contraction occur. It is always in some chronic state of contraction (tonus).

Most of the work is accomplished in the right side, called the antrum of the pylorus. The antrum contracts and the stomach forms something like the shape of a gourd, and with each contraction there is a little semi-fluid spurt or ejection of the stomach contents. When there is a small opening, or a resection made just beyond the pyloric orifice in the dog, the force developed by the contraction will cause the fluid stomach contents to be forced from 12 to 15 c. m. in distance, giving you some idea of the intensity of each contraction. When more work is put upon the gastric muscle than it is capable of accomplishing without a sufficient period of rest, there follows invariably a fatigue. This fatigue is peculiar in this, that the muscle fiber itself is not particularly involved. It is only inhibited from further physiological activity by the presence of a toxin, the toxin of fatigue.

There are formed in the tissues a toxin that produces the phenomena of fatigue, and there are also other bodies that are formed that produce anti-

*An address delivered in the Section on Practice Medicine of the Arkansas Medical Society, at the Thirty-first Annual Session, Little Rock, May, 1907

bodies, the antitoxins of fatigue. When the anti-toxin coexists with the toxin of fatigue, the fatigue is over; there is not any more fatigue. The muscle will carry on its work just the same as if it had not been fatigued at all. Just as a runner may run a thousand-yard dash, and the muscles of his legs may become fatigued, so he is unable to run any further; then, a little massage or rubbing, in which the anti-toxin of the serum is brought into contact with the toxin of fatigue, and is neutralized. This runner now can run another thousand yards with greater alacrity or speed that he did the first thousand yards. There is no exhaustion; the muscles have not given out; they have simply been inhibited from their work by over-activity. When this condition of gastric fatigue, relaxation or atony is produced frequently from time to time, there comes a state of chronic fatigue, a chronic atony, which we so frequently see associated clinically in our patients.

By experiment I found the toxin of fatigue produced in fatigued gastric muscle could be extracted and in the test tube was able to combine the anti-bodies found in fresh serum with the toxins, and thus neutralize the toxins of fatigue. When this atonic condition is before you as a clinical picture, in a chronic condition, the same factors are involved here, the same phenomena, as we find in the muscle weakness in any part of the body. The main demand is rest. The demand made here for recuperation and restoration is that of complete rest from the fatigue.

But, as we are obliged to use the stomach constantly, we cannot obtain complete rest, but only partial rest. In acute cases, nature comes to the rescue and causes vomiting and anorexia, the physiological rest for the stomach, and recovery takes place by the very emptying of the stomach and the rest that follows from complete anorexia. Gradually the patient recovers because the rest period is sufficiently long to overcome the atonic condition.

In infants, we see this is very common. Whenever they overload the stomach, retention, dilation, swelling up of the whole abdominal area, and then vomiting and anorexia, and then recovery. Over and over again we see it in children and in the adult, and when we approach these cases in the chronic condition they then assume such a complexity of symptoms that the true factors are veiled, and the conditions that we would notice and observe in the acute condition entirely escape our observation. Therefore, neurasthenic conditions, nervous states, toxemias, the general vascular symptoms, all of which mislead us from the real facts; simply the same condition we have observed time and time again in the acute con-

dition. It therefore, presents to us a problem when we find this chronic condition which will not recover by itself; we find that the rest period that they have from complete anorexia is not sufficiently long to restore the chronic fatigue, and we find that forced starvation of two, three, four or five days is not sufficient to restore the patient's condition to a normal state, so the patient goes on and on, sometimes taking a small quantity of food, sometimes a larger quantity, using the crippled muscles of the stomach indiscriminately, so that the atony increases, and we have greater fatigue, greater dilation.

Inasmuch as food is necessary to life, and inasmuch as we have no other means of sustaining life for any length of time except through the use of the stomach, it becomes one of the greatest problems we have before us to meet the conditions that are presented, to correct them by dietetics and to restore the condition back again to the normal status. The two problems involved here are rest and work; so to adjust rest and work to each other in our feeding treatment, in our treatment by dietetics, that we shall cause complete restoration of all the organs.

The Germans have long used a method which, theoretically, seems correct, and that is to reduce the quantity of food to one-half or one-fourth of the amount necessary to nourish the patient, by dieting and feeding in small quantities so as to lessen the work of the muscle wall of the stomach, and feed the patient more frequently, every three hours, upon a small quantity, thus giving rest to the weakened stomach and probably restoration. In certain acute and sub-acute cases, such form of treatment is always met with more or less success. But, in the advanced chronic type we find that feeding even in small quantities frequently repeated is not of such great value as a long period of rest between the meals. Thus, in the baby, it was formerly thought that we must feed in small quantities every two hours. Now we know better, and in place of that we feed every four hours, doubling the time as formerly, separating the distance so as to give time and opportunity for the stomach to rest up from the efforts of the previous meal. In other words, the rule may be applied in general, that we will not give any food until the stomach is empty. When food is put into the stomach, when already the stomach contains a large quantity of partly digested food, there results an interference with the whole digestive process, the chemistry is disturbed, a crippled condition of the peristalsis and digestive anarchy results. Partly digested food mixed up with food more or less completely digested, when forced into the intestines and absorbed into the circulation improperly prepared, produces toxemias that are the direct result of these disturbed

chemical and other digestive functions that have been going on in the stomach, whereas if no food is put into the stomach to interfere with the previous meal, no such toxemias will occur. Many times in children and in babes we have believed that the toxemias and all the symptomatic phenomena were due to micro-organisms; that the micro-organisms developed so rapidly as to produce the catastrophe so often observed. We have seen all these phenomena without any evidence of any bacteriological increase or evidence of infection.

I have made a great many observations, both in animals and in the human, of the bacterial contents of the stomach and intestines, and did not find so often that they are changed so much as we found these disturbances of the chemistry of digestion as the result of imperfect digestion where one meal is put into the stomach when another is already partly undergoing digestion within the stomach. Whenever we correct the disturbance in babies in the manner I have just mentioned, separating the distance four hours instead of two hours' feeding, the alarming symptoms are entirely subdued.

The problem involved is the mechanics of dietetics. If we remember that the movements of the gastric contents are produced by the contraction of the gastric muscle by which it grinds up the food finer and finer by the rythmical contractions increasing in energy and number, thus finally forcing the contents through the pyloric orifice, we will understand that some of the mechanical work accomplished on the food may be produced outside the stomach. The object of this motion aided by the digestive fluids is to render the food suitable for intestinal digestion. Mechanically it is literally ground up. The completion of digestion is carried on in the small intestines. Therefore, will it not appear to you, and to all of us, that if we could render that food finer in particles, mechanically made finer, we would have accomplished the first indications in the problem of dietetics in these cases of atony of the stomach? Whether it be a child or a babe at the mother's breast or in the aged, the same principle is involved in meeting the indications for dietetic treatment. In the babe at the mother's breast, nursed at too frequent intervals, its milk in the stomach coagulating in large chunks so that the stomach is unable to carry on the work of reducing it to finer particles, we have the same problem involved, because the muscles are too weak; they cannot act; they become fatigued; they become atonic; they dilate, and then there is an accumulation of these particles, a disturbance of digestion, when one meal is put upon another, and soon there results gastritis with dilatation and then there follows a serious catastrophe.

The Germans have one method of correcting it, and that is to feed the infant buttermilk, because it is not coagulated in the stomach, but outside where the clot is reduced to the finest particles. The mechanical work has been accomplished, and that gives rest to the atonic and weakened stomach, and the baby recovers. Another method used a great deal is to coagulate the milk before taking by rennet, and shaking it up into fine flakes, so that the mechanical work is so much lessened that rest is given to the stomach. It catches up, as I might say, and regains its strength and power, and is able to empty itself into the intestines, and recovery takes place.

These principles, while they are common-sense, are all based upon careful scientific investigations both on the animal and on the adult patient. I wish I had time to present to you all the data of these experiments that have proven these points, because they have such wide significance and are of such great importance, but of no greater value in the practice of internal medicine than of surgery.

In the child we see so frequently the imperfect and irregular habits that parents indulge their children, so that one time they are permitted to eat large quantities of food, and another time they eat a very small quantity, and then go for a long period of time without anything, and they become exceedingly hungry and overload the stomach, and when they reach another hungry state there is a tendency to too rapid eating. That means larger chunks of food, and larger chunks of food remaining in the stomach require more mechanical work, and that means fatigue, and fatigue means atony, and atony means dilatation. We have, therefore, another problem before us. We find difficulty to educate the child or adult to masticate the food properly and thoroughly. We cannot always educate the parents to see that the child eats regularly. We are incapable of mastering all the problems of dietetics in these cases of disturbed digestion, but can insist upon the food being mechanically reduced to finer condition before eating, chopped up carefully, such as puree of potatoes, and ground-up meat, and insist that under no conditions shall anything but food prepared in that manner be allowed to be taken by the patient. I have seen severe cases of atony and dilatation of the stomach in children cured by merely having the food thus prepared. You have seen ground-up food given to horses and cows. You know the Department of Agriculture advises these principles in feeding cattle and hogs. Why not in the human animal? This is a factor of great importance, but we do not see it sufficiently emphasized in text books. It must, therefore, be neglected very much by the general practitioner.

We have a problem in atony that has been one of the greatest problems we have to deal with. You often see in these atonic conditions, even though the gastric juices be sufficient, and often in excess, that still the patient cannot eat meat; that meat acts as a poison; and we attempt to give them vegetable food. In giving them vegetable food, we find they must consume an excessive quantity before they can get sufficient nitrogen. It is very difficult to select nitrogen from vegetable food; more difficult on account of the nitrogen being in box of cellulose. It is difficult for the gastro-intestinal tract to utilize and select sufficient nitrogen out of vegetable food to sustain life. We will say that it is necessary to have 100 grams of proteid food. It requires an enormous quantity of vegetable food to make up 100 grams of nitrogen, and the result is that we give them more of the starch and more cellulose and more of the other constituents than is good for the patient in order to obtain that small quantity of nitrogen that is necessary to sustain life. So, the problem of a vegetable diet is, therefore, that of nitrogen. It is the nitrogen problem, or protein or albumen, if you please. For that reason, we cannot give these cases an exclusive vegetable diet and obtain satisfactory results.

Again, such large quantities of food also increase the atony and dilatation. Look at the "potato-belly" of the Irish, as an example; of the immense amount of potatoes necessary to select the small amount of nitrogen needed to sustain life. As an example, look at the various herbivorous animals with the great dilated condition of the whole alimentary tract, and the equipment necessary for such diet. Without going into this threadbare argument, I want to say that we still demand our nitrogen mostly from the animal source, meat food. But we know that there are many forms of disease today, that can be traced to a meat diet. If you study the geography of dietetics, you will see that there are certain diseases that are confined to the meat-eaters' zone. We have gout and rheumatism. We do not find gout, rheumatism and arterio-sclerosis in China or Japan, or in those countries where meat is not eaten. We find this class of diseases confined to the meat-eaters' zone. Bright's disease, typhoid fever, appendicitis and ulcer of the stomach are rare in China, Japan, India, and certain portions of Europe. They have no such disease as gout in India. Diabetes is called the "gout of India." Now, wouldn't it be a pertinent question to inquire what part of the meat is so poisonous and so disastrous in results?

Before we attempt to take up this meat problem I have presented to you, must we not know what part of the meat is poisonous? Is the myosin or albumen (globulin) poisonous? Is the connective

tissue poisonous? Is the fat poisonous? Is it all poisonous? Are the meat extractives, the purin bases, the xanthins, hypoxanthins, creatin and creatinin, poisonous? Are the uric acid bodies poisonous? What and how are any of these bodies poisonous? Wouldn't that be a beautiful problem for research?

And that is a problem I attempted to solve last year after five years of research work. We fed animals different portions of the meat. We separated it all into its different component parts. We fed some upon this myosin; that is the muscle plasma (globulin), the albumen of meat. We fed some upon stearine and other fat found in the meat. We fed others upon the connective tissue of gelatin and another group were fed meat extractives, such as Liebig's extractive of beef. Invariably the animals fed upon extractives all died with lesions of the kidneys or lesions in the liver and many animals died from hemorrhage or perforation or ulcer of the stomach, and I presented these investigations in Lisbon last year. We did not find any more poison in myosin than in casein, or in egg albumen or vegetable albumen. Myosin, the meat proteid, alone, is no more poisonous than legumin, the protein matter of peas and beans, glutenin and gliadin from wheat, edestin from hemp seed.

We obtained no more poisonous effects from the meat when freed of extractive and fat than was obtained from any of the other forms of proteid. It seems some deleterious substances are formed by the action of extractives and the intestinal bacteria.

The next problem involved here is what would be the result in feeding these patients the meat protein after removing the extractives from this meat.

First let me present a few clinical facts. We know that in eclampsia, where we have general toxemia, we cannot feed our patients meat soups, because they contain extractives. It is considered among obstetricians malpractice for a physician to feed a woman in an eclamptic condition extractives or feed her meat soups in any form, for they will frequently precipitate eclamptic convulsions. In advanced Bright's disease, it is well known that soups are contra-indicated, as well as meat extractives in any form. In cases of cholemia or uremia with impending attacks of convulsions, no one with clinical experience would attempt to precipitate an attack by feeding meat extractives. What must we say in chronic conditions? We all recognize in rheumatism, gout, arterio-sclerosis, etc., meat extractives are contra-indicated absolutely.

Now, what do we observe when we take and carry on side by side these experiments both

clinically and in the laboratory? First, one word about laboratory work in these dietetics, and compare it with the work in the clinics. No advance in the science of medicine is made by clinical work alone. It is only by experiments that we make any advance. We might feed patients, observe them clinically and report in the society meetings, and each one offer his cases coupled with his own opinion, but we make no further advances until we have gone into the research laboratory and absolutely made these experiments upon animals, because in that way only are we able to learn the true facts and underlying principles. Then we can go into the clinic and compare our results, and we have then something learned, something obtained and some advance is made. To repeat to you the array of cases of patients fed with meat freed of extractives would be to take up too much of your time, and this is not the occasion for detailed clinical reports, but to give you simply the results and the methods, so that you yourself can undertake the same line of investigation.

In order to remove the extractives from meat, it is necessary to put it in cold water first, because if you heat it up and try to boil them out you coagulate the myosin, and the extractives will still remain in the meat in a large amount. Boiled meat contains a higher percentage of extractives than meat not boiled; sometimes two or three times the percentage of extractives will be found in boiled meat than was in it before. The per cent., in other words, is raised by the abstraction of water. But, if we put the meat in cold water first over night, we thus remove part of the extractives, just as we do in the bacteriological laboratory in preparing boullion culture media to grow bacteria to and make toxins in the laboratory we use the same extractives to produce them. We always use the boullion culture because out of these extractives we can make more toxins than out of other substances. Our proposition is to get rid of these extractives. We first grind the meat in a meat grinder, usually using a round steak. We remove the extractives by putting the ground meat in cold water, as stated we do in the laboratory. So, in preparing this meat for clinical use we do the same, only in clinical work we discard these extractives and retain the meat pulp for the patient.

We put the ground meat or chopped meat in cold water over night, and in the morning you will find the water containing blood and a large amount of these meat extractives that are not to be used. It is not food. So we remove these extractives by this washing process in cold water and then press out the juices with a press and discard the juice. By the crushing effect of a heavy press we break up the meat fibers. The meat pulp that is

left after pressing out the juice is covered with water and placed in a sterilizer and kept there for an hour and a half under steam pressure. In our laboratory we use an autoclave under steam pressure of three and one-half atmospheres; that is, about 40 pounds pressure. But we may put meat in an Arnold sterilizer and keep it there for three or four hours, and we will have a transformation of all the connective tissues into gelatin, and a removal of the balance of the extractives left in the meat, and also we remove the stearine fat which is so hard for these patients with an atonic dilatation to digest. Stearine has a melting point of 140° F., and you know the higher the melting point of fat the more difficult it is to digest. Hence, cream, which is made up of palmitin and olein, and thus of the low melting point of butter, 80° F., is easy to digest. Olein is very quickly digested and absorbed, but stearine is very difficult to digest and results in increasing the digestive trouble.

What is the result of this treatment of the meat? We have a product containing from 55 to 58 per cent albumen, when meat ordinarily has only 20 per cent of albumen. So, 100 grams of meat has 55 grams of protein or albumen (globulin), when before it had only 20 grams. Hence, we have a more digestible, a more easily absorbed and a higher food value content in this meat product.

In gastric atony we frequently find the connective tissue from meat in the feces, because the stomach is the only place where it is digested. If connective tissue is not digested in the stomach, we find a large amount of connective tissue from the meat with the undigested muscle fiber in the feces. This is one of the diagnostic points in these cases of atony of the stomach. The connective tissue in the feces can be recognized macroscopically as well as microscopically. By this hydrolysis, by a temperature of say 120° C. or 250° F., under steam pressure, we turn all the connective tissue into gelatin, and it will thus be in a liquid state when warmed and we have nothing in the stomach but myosin or muscle plasma. This form of proteid passes into the blood from the time it is taken into the stomach in 1½ or 2 hours, which is quicker than egg albumen, or casein, or any food I know of.

Therefore, we have a preparation that gives rest to the stomach; one of high nutritive value, which saves the digestive apparatus a large amount of work. All bacteria and other parasites found in the meat are completely destroyed by this prolonged moist, high temperature.

We will now consider the treatment of carbohydrate foods. Those of you who have studied the Russo-Japanese war statistics and the diet of the Japanese race must have realized what won-

derful power and what wonderful strength they possess, and how much work they can do. They have rations which contain sufficient nitrogen in dried fish, which contains but little extractives. They also obtain their nitrogen from eggs, and carbo-hydrates from rice. Rice is a very digestible food; one of the most digestible of all carbo-hydrates. But it is necessary to cook it thoroughly, and, for weak stomachs, it must be cooked beyond the ordinary time. When we put it in water and simply boil it for one or two hours, we do not cook it thoroughly enough, and, therefore, it is more difficult to digest. But, by placing it in an apparatus like an Arnold sterilizer, or better, the autoclave, and leaving it there under certain pressure for two or three or four hours, the starch is all turned into amylo-dextrins and other assimilable dextrins. On mastication it will turn sweet, because the first stage of digestion has taken place by hydrolysis. Hence, we may help the weakened stomach by doing some of the work on the outside before the food is eaten. In this way we can accomplish part of the work, and that is often all we need to do to aid the stomach in restoring its lost motility. As a lame man is helped by a crutch, it is better to give him one than to carry him; he will gain more strength in partial use of the limb than to be constantly carried in an ambulance. So with the stomach. In preparing meat and starch by the physical methods here described, none of the nutritive value is lost and they remain a natural food; while artificial food prepared by chemical means, such as the proprietary liquid or solid peptones and many dextrin preparations, are not only useless but harmful.

METHOD OF PREPARING THE FOOD FOR THE TABLE.

Meat treated by this process can be taken as a liquid food, which is especially desirable in some sub-acute conditions. Mix two tablespoonfuls of the meat pulp with boiled arrow root or corn starch, one-half teaspoonful, with a large glass of water flavored with clove or cinnamon, and sweetened to taste. The meat pulp worked through a fine wire strainer and reduced to the finest particles and taken as a liquid food is excellent in typhoid fever. In place of sugar, salt and pepper can be used a flavor with sage, bayleaf or sherry wine. In force feeding,—feeding a patient through a stomach tube,—in cases of complete anorexia, or in persistent vomiting, the starvation is not only prevented, but appetite returns, and, with other appropriate treatment, vomiting ceases. Another simple method of preparing the meat is to warm it up in a pan, mix in a little flour, continually stirring, adding cream, salt and pepper. A flavor of bayleaf may be added. Serve on toast.

A currie of meat and rice may be easily prepared by placing a portion of the prepared meat in a small dish surrounded by some of the cooked

rice, flavored with currie; a beaten white of egg is placed over this and placed in a hot oven until slightly brown. Sprinkling over some chopped parsley completes a very attractive, nutritious and easily digested dish.

Croquettes may be formed by combining with rice thoroughly cooked mashed potatoes, bread or cracker crumbs; flavor to suit taste, roll in a little egg and heat quickly. Serve with a brown gravy made from burnt flour, flavored with sherry wine.

A baked dish on the order of a veal loaf can be prepared by mixing one-third prepared meat with two-thirds bread crumbs, mixed with milk and egg; flavor with sage, majorum, thyme or bayleaf as suited to taste; place in a pan; bake in an oven; serve hot or cold, with or without a sauce as desired; this makes an excellent dish. Sandwiches made from cold sliced meat loaf is excellent for a quickly served luncheon.

The prepared meat may be broiled with a rasher of bacon, or the meat may be appropriately combined with eggs in Spanish style, with spaghetti cooked in the Italian way, and innumerable combinations and changes may be provided giving the necessary variety, so that patients and those who are not patients, demand the food for its pleasant and agreeable taste and quick, easy digestion. The rapid digestion and absorption renders the lower bowel relatively aseptic, more freed from putrefaction and of the products of bacterial decomposition than can be accomplished by antiseptic treatment or other methods. If the flora is deficient in germs of fermentation to inhibit the growth of the germs of putrefaction, this condition can be adjusted by giving fruit juices, buttermilk, etc.

Where there is demand for a residue in the lower bowel to assist in bowel movement in cases of atony of the colon and constipation, that may be met by giving bran, common wheat bran bought at the feed store. Take one-half cup dry bran, sterilize dry in the oven and mix with oatmeal as a breakfast food. The oatmeal must be cooked for several hours and the bran added dry (not boiled) to the dish; serve with milk and sugar. Bran may be taken alone at bed time or at noon with hot water or milk, when desired.

MEAL TIME.

One of the important dietetic problems is the time of taking each meal.

In this country we usually eat three meals daily, but in our cases of atonic dilatation of the stomach the movements are sluggish and more time is required to empty the stomach and provide a rest period for the empty stomach to rest up after the effort of digestion.

I have found that two meals daily, one in the morning and one at night, will result in a better condition of the digestive apparatus than the usual three meals daily.

Bran may be used at noon to quell the sensation of hunger of the noon-day habitual demand for food. This soon disappears as the new habit is formed.

In severe cases only one meal daily is given; this may be afterwards increased to two meals daily.

The dietetic method of treatment I have outlined not only increases the working power of the gastrointestinal tract and prevents the abnormal growth of bacteria in the alimentary system, but reduces the general toxemia, and the metabolism of the body returns to a more normal standard. Many diseases of metabolism may thus be cured.

OTHER METHODS IN CONNECTION WITH DIETETIC TREATMENT.

As an adjunct to the dietetic treatment of the stomach and intestines, lavage is often used to remove the mucous and food residue from the stomach.

My experience is that my methods of restoring the normal condition of the motor and secretory activity of the stomach renders lavage unnecessary.

When we treat the heart by our modern methods we do not simply put the patient to bed and administer digitalis, but we subject the heart to some physical work by carefully adjusted exercises and baths followed by a period of rest. This is repeated until the heart regains its normal strength with compensation by hypertrophy and permanent good usually follows. My physico-mechanical methods of treating the stomach and colon have given brilliant results in the last 10 years.

In certain forms of gastric dyspepsia with atony of the stomach and sluggish circulation the mucus accumulation may not appear so evident, and cleaning out of the stomach is not indicated; in fact, to use lavage in such cases only seems to increase the trouble. The patients grow thin and weak from the result of lavage in that, as previously stated, the secretions, peptones and albumoses delayed in the stomach are also washed out. Even if lavage is performed when the stomach is empty (which is seldom the case), the water coming in direct contact with the mucosa acts as an irritant; especially is this noticeable in cases of hyperchlorhydria. After a few treatments, lavage, therefore, must be abandoned, but lavage, as we know, mechanically stimulates the stomach by the stretching on introduction of the water and the reaction after its withdrawal. If a similar procedure is carried

out at frequent intervals, without the great detrimental effect that we obtain from the washing out of the gastric cavity, we may obtain the valuable results of regular exercises of the stomach and of the heat of water acting on the circulation. This can be accomplished by attaching to the gastric end of the stomach tube a small, thin intra-gastric bag introduced into the stomach, which may be rapidly distended with hot water, and then its contents rapidly withdrawn, thus obtaining a high degree of mechanical stimulation and the physical effects of the heat. This can be repeated frequently without injury to the stomach or danger to the patient.

In cases of marked dilatation due to atony of the gastric musculature, the water seeking the deepest portion of the stomach causes the stomach to sag downward. Even a pound weight seems excessive for a weak stomach and as water is non-compressible it does not promptly excite peristalsis of the stomach, just as in atony of the bowels enemas frequently increase the trouble rather than correct the constipation. To overcome this difficulty we may introduce air into the bag within the stomach instead of water. This inflation distends the stomach in all directions. The stomach on inflation rotates forward and upward; this lifts up the stomach instead of bearing it down as when water is used. As the air can be released promptly, it causes rapid retraction of the stomach. Frequently repeated, this procedure excites peristalsis and restores the motor function of the stomach.

In most cases the intra-gastric bag can be dispensed with, and the air may be forced directly into the stomach, moderately distending it, and then allowed to escape through the tube. This direct method is very useful when we wish to apply heated vapor to the mucous membrane. Local medication can be added. Volatile antiseptics and stimulants, such as menthol and oil of cloves, can be put in a bottle containing water heated to a temperature of from 55° C. to 60° C. (131° F. to 140° F.). Compressed air is then passed through the water and the medicated vapor is forced through the double tube into the stomach. This procedure constitutes a pneumatic gymnastics or exercise of the stomach.

SURGERY.

In complete mechanical obstruction of the pyloric orifice, an outlet for the stomach must be re-established by surgical interference, and, likewise, in certain cases of ulcer of the stomach, relief may be sometimes obtained by surgical means. Dyspepsia due to atonic dilatation (fatigue of the gastric muscle) as well as catarrhal conditions do not require surgery.

After a number of years of clinical experience I have found that the methods of treatment outlined above are the most rational and effective means of permanently restoring to health a large variety of dyspeptic cases suffering from chronic gastritis and from atonic dilatation of the stomach.

For the benefit of those who may be interested further along these lines, I append hereto the bibliography on the subject.

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Sectional Addresses

THE CLINICAL DIAGNOSIS OF TUMORS.*

By Mahlon D. Ogden, M.D., Little Rock, Ark.,
Chairman of the Section on Pathology,
Arkansas Medical Society,
May, 1907.

In preparing a paper upon the clinical diagnosis of tumors, it is not my intention to advance anything that is new. On the contrary, it is an attempt to present in an acceptable form a few facts which appear to me to be of value in this relation. To this end I have drawn freely upon various authors (Ziegler, Henke, Levings and others) for information, and have selected, that which, from my own experience, seems to be of most importance.

The proportion of this class of diseases is best appreciated when we learn from the census of 1900, that cancer ranks seventh as a cause of death; that 2,837 persons out of each 100,000 die from cancer and that it is seemingly on the increase. The above figures refer to carcinoma alone and do not include the other malignant tumors.

The term "tumor" has been thus defined by Ziegler: "A tumor is a new formation of tissue, which apparently exists and grows independently,

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possessing an atypical structure, exerting no beneficial function in the organism and finally, having no typical termination to its growth."

Clinically these "true" tumors must be separated from the so-called infectious granulomata, embracing such diseases as tuberculosis, syphilis, leprosy, actinomycosis, blastomycosis, etc., which is usually not very difficult and also from the various inflammations, which, strange to say, is not so readily accomplished.

It is from the two classes mentioned above, that true tumors must usually be separated, but a malignant tumor (and some benign ones) can simulate almost every disease in the category so that one is tempted to paraphrase Johnathan Hutchinson's famous remark about syphilis: "To know tumors is to know medicine."

The ideal classification of all diseases is upon an etiologistical basis, but in the case of tumors the etiological agent is unknown and until it is known, we must accept the present method of classifying them according to their histogenesis. This is a poor method at its best and is open to many objections and criticisms but it is the most plausible one we have and to discard it would give rise to great confusion, so we must continue to classify tumors on histogenetic grounds until we can demonstrate an etiological agent. And even if the etiological agent be discovered, the study done upon histogenetic grounds will not be of less value. The significance of the anatomical structure of the tubercle has not become of less importance because of the discovery of the exciting agent, the tubercle bacillus.

But for the clinician especially, this method is of little value for his query is not "from what layer of the blastoderm did the tumor spring?" but, "is it malignant or benign?" So tumors clinically are classed as malignant or benign, which is also faulty for frequently there are cases where it is impossible to say, after the most careful examination, microscopic and otherwise, whether or not the growth is malignant. Many of those points which were formerly considered to be pathognomonic for either one or the other class of tumors are now known to be worthless in this regard or at most only presumptive.

This is neither better nor worse than, what occurs in the other branches of natural science. Some of the laity may think that it is an easy matter to distinguish a plant from an animal, and so it is usually, but when we come to the lowest forms of life it is often very difficult. And thus it is with tumors. In a perfectly typical case it is usually a simple matter to differentiate a malignant from a benign growth, but there will always be cases where, after exhausting all the means at our command, we are still in doubt and time alone can make a diagnosis.

The microscopist must not therefore make a positive diagnosis, based upon an artificial scheme which does not correspond to facts within our knowledge, the scheme or theory having but small practical value in as much as it only furnishes a working hypothesis for research and investigation. We should in doubtful cases tell the surgeon just to what degree of certainty our diagnosis goes and leave the matter to his judgment, and should not be tempted into saying more than we should by his dissatisfaction and evident necessity of acquiring something more definite, otherwise he may be misled to a procedure, which, uninfluenced, he would not have followed.

But it is only in isolated cases that we are not able to give a definite answer. For instance, our chief effort is to perceive the smallest beginning of a malignant tumor and to remove it while yet in a condition most favorable to a cure, but, to recognize a beginning cancer, for example, and to differentiate it from lesions morphologically similar is often the greatest diagnostic difficulty. The large tumors are plainly much easier to diagnose and differentiate.

In such examinations, as in other branches of medicine, the personal experience of the examiner is a large factor. However, one is able to establish certain general principles out of a chaos of details by paying due attention to the accompanying conditions, such as history, general appearance, location, etc. I will revert to this later.

MICROSCOPICAL EXAMINATION.

It is scarcely necessary to say anything about the microscopic examination of tumors. Every clinician knows how difficult it is to diagnose some ulcers of the tongue, for instance; to say whether it is tuberculosis, syphilis, actinomycosis or only the result of a bite or foreign body, or whether it is a beginning cancer. And yet it is of the greatest importance to know immediately whether it is the latter or not, for the chances of good results after radical removal are in direct proportion to the progress which the tumor has already made. On the other hand it is not always possible to determine microscopically whether the growth requires the removal of the entire organ or only a part thereof. And also there will always be a certain proportion of cases, where the histological examination of a test excision will not allow a positive opinion of the nature of the process. This fact can depend upon external conditions. For instance, it is not possible to remove a piece of tissue from the larynx large enough to say whether the tumor penetrates into the depths, thus being malignant, or not. In such cases the clinician must decide for himself, what course to pursue. As a rule, he will be justly inclined to proceed radically if malignancy is not excluded. In regard to the danger of the test excision, one

usually hears that malignant tumors grow faster after the removal of a piece of tissue for examination. Whether this be true or not, it makes but little difference. If the tumor is benign no harm is done; if malignant, the operation should follow the test excision as soon as possible anyhow.

But the test excision is not the only valuable part of the microscopic examination. The tumors removed at operation constitute another large field. It not infrequently happens that a careful microscopic examination of a tumor shows a condition entirely different from that first diagnosed and the prognosis and treatment will vary accordingly. And again, by the microscopic examination of the borders of the removed part we can often settle the question as to whether the tumor has been entirely removed or not. We know that the smallest particle of a growth left behind can soon attain the proportions of the original tumor and that the delicate columns of tumor cells following the fine lymph channels are not perceptible to the naked eye or palpating finger.

In this connection the examination of suspicious lymph glands adjacent to a malignant tumor, especially a carcinoma, is of importance, as small metastases may be found which are invisible to the naked eye and which materially influence the prognosis.

And here again, we return to the question of the classification of tumors, which in this connection is not only of theoretical but practical interest as well. The microscope shows to which class a tumor belongs, thereby affecting the prognosis, for we know from experience that some forms of tumors are much more malignant than others. A small round cell sarcoma, for instance, is very malignant and almost certain to recur locally or elsewhere after removal, while a spindle cell sarcoma, with a large amount of fibrous tissue, a fibrosarcoma, seldom recurs after thorough removal, rarely metastases and in fact almost belongs in the benign class.

The microscopic examination also separates the true tumors from the so-called infectious granulomata as mentioned before and in most cases gives a true idea as to the nature of the process.

And last but not least the microscopic examination acts as a check upon the clinical diagnosis. The physician who checks his clinical tumor diagnosis by a microscopical examination will, from time to time encounter some great surprises, but they will become less frequent as he becomes more experienced and the data thus obtained becomes invaluable. The microscopical examination of tumors is of value therefore from an educational standpoint.

THE MACROSCOPICAL EXAMINATION.

This is a much neglected but none the less important part of the examination of a tumor. A careful examination of the excised piece of tissue or of the whole tumor should in each case precede the microscopical examination, for much can be learned that is of aid in diagnosis. The FRESH specimen is especially desirable in this case, for when the tissue is placed in some hardening fluid, it loses much of its natural appearance. The color and consistency are so changed that one experiences much more difficulty in arriving at a conclusion.

In many cases one can make a diagnosis with the naked eye that is almost certain, but as the gross examination should not be neglected, vice versa, the microscopical examination should not be entirely neglected in tumors where the diagnosis is apparently plain in the gross, for there may be small suspicious spots not visible to the naked eye in a specimen, which macroscopically appears perfectly benign.

In the gross we are able to recognize with the naked eye the tissue of which the tumor is essentially composed. We can diagnose a lipoma, chondroma, osteoma or a myxoma, but we are liable to be deceived in the latter, as some carcinomata assume this form and may thus be overlooked macroscopically. The gross diagnosis is much more difficult with those tumors not composed of a pre-existing tissue, as carcinomata and sarcomata. Virchow's sign for the gross separation of these two is still of value, viz.: That one can scrape with a knife from the cut surface of cancers an emulsive juice, composed of fatty cancer cells, the so-called "cancer milk."

Following the external inspection, all parts of the tumor should be uniformly examined. This is best accomplished by making parallel cuts through it so that the sections can be placed together again in their original position, just as a brain is sectioned. If, from the gross examination it is found that it is not a true tumor after all, but one of the "infectious granulomata" it is important not to use any preserving fluid until an effort has been made by means of smears to determine the exciting agent.

In this connection let me say a word about the possibility of being deceived regarding apparent encapsulation. The gross specimen is never decisive in this regard, for some malignant tumors are apparently encapsulated macroscopically, while the microscope reveals extensions of tumor cells into the surrounding tissue.

If the specimen is a cyst, the microscopical examination of its walls is never superfluous. Only recently I saw a seemingly benign cyst, which under the microscope showed a cancerous condition of its walls. A POSITIVE macroscopic find-

ing only, is of value in case of a tumor suspected of malignancy. The negative findings prove nothing to the contrary as some rare malignant tumors do not grow downward into the underlying tissue. The microscope is decisive in these cases.

A few hints in a general way on the selection and preparation of tissue for examination, may not be out of place here. In the first place fresh tissue is always desirable. Necrotic tissue and sloughs are practically worthless as they will not take a stain. Dried out tissue is a little better and can sometimes be rejuvenated. If too great a time does not elapse between removal and examination no hardening fluid at all should be used. However, if such is necessary the most convenient and accessible of hardening fluids are ninety-five per cent alcohol or a ten per cent aqueous solution of formalin. Personally I prefer the latter as it can be used for almost any method of imbedding and also for frozen sections.

Much depends upon the selection of a place for the test excision. If possible pieces of tissue should be taken from different parts of the tumor, but where only one excision is permitted the edge of the growth is the place of choice. One must be sure however to include both diseased and healthy tissue in the piece removed. The examination of the edges offers the best opportunity of properly classifying the tumor.

In removing the tissue for examination, it should be handled as little as possible. A sharp knife and a pair of tissue forceps are as efficient as anything I know. Scissors, as a rule, crush and distort it too much. One must be sure also that tumor tissue is included in the section. It has happened that malignant cases have been reported negative simply because the incision did not go deep enough to include the tumor tissue.

As complete a history as possible should accompany the specimen sent to the pathologist. This is *very* important, as the microscopist can not always make a diagnosis from the microscopical picture alone. The site of the growth should always be stated. For instance, were we to find in the interior of some organ the infiltrative accumulation of cells which frequently compose the well known, absolutely harmless soft warts, we could condemn no examiner if he were to diagnose it as carcinoma or sarcoma, according to the arrangement of the cells, and yet we know from experience that if we find the same cells in the same arrangement in the cutis and macroscopically it shows the picture of a soft wart, it is absolutely harmless. That it sometimes in rare cases becomes malignant does not concern us here.

Certain tumors also have a predilection for certain locations, thus giving us a guide in the diagnosis. Carcinomata do not originate from bone nor sarcomata from epithelial tissue, for instance.

The rate of growth has a decided influence both upon the diagnosis and prognosis. Benign growths as a rule grow slowly, malignant ones rapidly. But in obtaining the history one often hears that a growth has remained quiescent for a number of years and has then suddenly begun to grow rapidly. This is more often the case with epitheliomata, but occurs with other malignant growths as well.

The age of the patient is a factor. It is well known that as a rule carcinoma occurs in advanced age while sarcoma occurs in youth. However, we must not lose sight of the fact that cancer does occur in youth and sarcoma in old age. Especially must we be careful, when we realize that cancers occurring in youth are much more malignant and proceed rapidly to a fatal termination. Within the last year I saw a case of carcinoma of the ovary in a girl six years old. The age of the patient has another bearing upon the microscopical findings. Some changes in the vessels which are physiological in old age are pathological in youth and wrong information in this regard may lead to a mistaken diagnosis.

There are some other points in the examination which I will pass over briefly.

The temperature should be taken. Rapidly growing malignant tumors often raise it one or two degrees. Benign ones rarely do so. The condition and motility of the skin over the tumor, the motility of the tumor itself, the presence of metastases, any loss of strength or weight should all be noted. The previous treatment should not be overlooked as the injection of caustic substances into a benign growth for instance, can cause a heaping up of the epithelium until it appears malignant under the microscope and would be so diagnosed if all the facts were not known.

And now in conclusion, let me emphasize a few points brought out above. First, An early diagnosis in these cases of malignant tumors is absolutely imperative. If taken late we can oppose no obstacle to their relentless onward growth.

Second: The microscope is the best means of diagnosis and should be employed whenever possible.

Third: The microscope should not be the only means of diagnosis employed, as by itself it is not always decisive, but it should be used in conjunction with the macroscopic examination and an accurate objective and subjective history.

DISCUSSION.

Dr. E. R. Dibrell: Dr. Ogden has given us many suggestive points of benefit. I don't know that I have been gratified more by a fifteen-minute paper than I have by this one. All of us can recount some cases that he has suggested to us. Especially in matters of the diagnosis of tongue tumors. A case fell under my observation lately that will

show you how, even with the most careful scrutiny and full preparation, one may certainly make a mistake in his diagnosis. The patient had ulcer of the tongue; had syphilis; had been treated for all manner and forms of syphilis; rather a dissipated man. His tongue became ulcerated, and he went to Hot Springs and took 500 or 600 gr. of iodide of potassium a day, and he gravitated to other parts of the country, and finally landed in that institution where pathology is more thoroughly taught and understood than in any other in this part of the world, and he fell into the hands of its great surgeon, who declared it cancer, after having made an examination microscopically. He enucleated his tongue. The patient was assured that that tumor would never recur. I had never treated him before the operation, and never made any mistake in the diagnosis. So, he fell into my hands. When I saw him he had a fistulous communication in the inside of his mouth, a little sinus that burrowed around underneath the skin and little pockets of pus forming, once in a while a little piece of ligature working out, and saliva dripping down from his mouth into the sinus around, and seemed to be kept up. I am not much of a surgeon, and I did not like to handle it, coming from such a source. It looked somewhat ominous to me, so, with a gentle hint and persuading in a round-about way, he jumped upon the train and went back to that same surgeon who had assured him that he would not get sick again. They operated upon him again and found that the cancer had recurred.

Now, there was a man subject to the most scientific skill both in examination and operation. In spite of all that man failed to get the benefits that science seemingly ought to have afforded him. That is what concerns us all; that the very best of pathologists, even at this day of advancement in pathological science, all hold up their hands and tell us, "We, too, make great mistakes."

We see the work of these men of national reputation, in charge of large hospitals, and observe that they, too, make a great many errors; and we can go back to our work in life encouraged and determined to go ahead and do the best we can, because mistakes are likewise found in every other locality.

Dr. Turck: I do not see in a paper of this kind the necessity for adding anything. You have heard the paper, and all the facts as presented are absolutely true. If there should happen to be a tumor that recurred after diagnosis has been made by a gross and microscopical examination, and prognosis made favorable by the clinician after removal, it does not in any way affect or have anything to do in connection with the pathologist in his work in absolutely diagnosing the presence of

the tumor. The contention of the essayist was the necessity of taking all of the pathological means of making the diagnosis, of clearly to find each point and limit it, macroscopical and microscopical examination, and the history of the case, all its symptomatology and its findings, so that if we take that paper and have it before us, and when a case comes in, just simply follow that, we shall be better practitioners. We are so very apt to depend upon our previous knowledge and our experience; it is not worth anything unless that experience and that knowledge is combined with all the best that scientific work can bring to us. The microscope, as he said, cannot stand alone; nor macroscopy alone. The microscope, macroscopy, the history, experience, empiricism, all must be combined to get best results. In regard to the removal of portions for examination, I simply want to add one little point, in fixing these specimens for examination. The fixing agents should be already prepared. I use different kinds of fixing agents for different kinds of tissue, according to what there is to obtain. It is my idea that the specimen should be dropped into the fixing agent at once, in order to forestall the necrotic change that takes place early, so characteristic of these malignant growths. They should be fixed so that they may be carried about and not torn or dried up and lost in the examination.

I have seen so many cases where early diagnosis had been made, the tumor removed, and the case got perfectly well and remained well for years.

I think that very little could be added to this excellent presentation. I hope that it will have the effect of stimulating the members of this Society to further and finer research work, which will add so much to the credit of the profession. I trust this good will go on until some future investigator shall have absolutely discovered the real cause of carcinoma. This kind of work, in my opinion, is one of the most important features that pertain to the practice of medicine and worthy of our most painstaking labor and untiring investigation.

Dr. Ogden: I am sorry to see that the paper was not much discussed, but am really gratified to hear it discussed so well by Dr. Dibrell and Dr. Turck. The points that led me to write a paper of this sort, and which I tried to bring out, were the result both of my experience with tumor cases, and also with the physicians who have had these tumor cases. Every once in a while I get some very amusing specimens of tissue for examination. I seem to have been credited with advanced foresight in making a diagnosis of some specimens that have been sent in. I am especially glad that Dr. Turck said something about the immediate fixation of the tissue. I acknowledge that I didn't say anything about the immediate fixation when

it was possible, and I endorse what he has said as to its importance. Particularly, the immediate fixation of the nuclei and of what mitotic figures might be there. One reason I left it out, was that I did not go into the minutiae of microscopical diagnosis, but I merely asserted that in the nuclei with atypical mitoses there was here one point in the diagnosis of tumors, and also the number of mitotic figures that you run across will give you some sort of an index as to the rapidity of the tumor growth. Prognosis in these cases, I suppose, is more important and more essential than it is in a good many other diseases.

It has been a gratification to me to be able to present this paper, and I only hope that it will lead some one to diagnose some of these tumor cases earlier, for therein lies their only hope.

THE DUTIES AND RELATIONS OF THE PHYSICIAN AND SURGEON.*

By W. A. Snodgrass, M. D.,

Chairman of the Section on Surgery, Arkansas Medical Society, May, 1907.

Fellow Members of the Arkansas Medical Society and Friends:

As chairman of the Section on Surgery for this meeting, I am expected to address you on some topic that is of interest to us all.

I presume you are all familiar with the progress of medical and surgical learning of the day. Therefore, I will refrain from going into the history of the advancement of surgical knowledge since our last chairman addressed you.

I wish to bring out a few points that I consider of great importance to us as surgeons and physicians, as well as to the public in general, as this is fast becoming the age of specialists in all departments of activity and learning. We find our profession divided into specialties, and no doubt, the great advancement in various lines of medical and surgical knowledge is due to specialization.

We should all specialize in some branch of medical knowledge, as we know that special study begets enthusiasm. If we become enthusiastic and seek the truth, we are more valuable as physician or surgeon to our patrons and the community in which we live. But we should remember that it is difficult to say, with our present knowledge of diseases, when the physician should surrender to the surgeon or the surgeon should give up to the physician. Therefore, it behooves us all to study both sides of the subject.

I certainly would not be willing to trust myself or any member of my family in the hands of a doctor who had become so specialized that he is capable of seeing only one side of the case. I

recognize the fact that in large cities and thickly settled communities that the best results are obtained by consultation of specialists in various lines of medicine. So long as we pose as general practitioners of the healing art, we must study all branches of medical knowledge.

There has been so much said and written during the last few years about the relation that should exist between the surgeon and physician, that the subject has been worn out, and so far as I know, the question is as far from being settled as ever. Let us not discuss the relation between ourselves, but take up the duties we owe to the patient, as physician or surgeon, and see if the question of our personal attitude toward each other will not be made clear.

First of all, where is the dividing line to be drawn between physician and surgeon? There can never be a perfect separation. A medical case may terminate into one purely surgical. On the other hand, surgical cases often need the careful watching of the most attentive physician. Our duties to the patient, first of all, is to make a correct diagnosis. The dividing line between the physician and surgeon, in-so-far as the patient is concerned, is to make a correct diagnosis in every instance. If we diagnose a case correctly, it is not difficult to tell to what class it belongs—medical or surgical.

The next point is to be honest with ourselves and our patients. Do not treat surgical cases medically, frankly tell the patient the condition is a surgical one. If you do not do surgical work, let the surgeon be called in.

The surgeon should never under any circumstances, treat medical cases by surgical methods or do unnecessary surgical operations; neither should a general practitioner allow himself to be persuaded to give medicine when he thinks it unnecessary and doubts its doing good. If the case is a surgical one, he should be a man with courage enough to say so and institute the proper surgical treatment.

Until the diagnosis is made, we are on neutral ground, then one must be superior to the other. How many of us who do general surgery, are called in to see cases when moribund, which have been strictly surgical from the beginning and have been treated by internal medication until the last opportunity to surgery has almost gone.

The surgeon in his zeal, to benefit his fellow-man, is persuaded to make one more attempt against great odds, performs an operation and finds such great destruction of tissue has taken place that all hope of recovery of the patient is gone. The patient dies and surgery gets an unjust criticism from the physician and public in general. A valuable life is lost and why? Because some doctor has either been ignorant or dishonest.

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or, perhaps, he thinks that, "If I call assistance in this case I will not be considered an able man in the medical profession and might loose the practice of the family."

We see every day symptoms that are caused from surgical conditions treated by internal medicine. Pelvic inflammation as a result of lacerated cervix. Backache from laceration of the perineum and subsequent prolapsus or other displacement of the womb. Or cystitis, caused from the pressure of abdominal tumors. Hemorrhoids which are caused by subinvolution and retroverted uteri, treated by ointments and suppositories, when the cause of the disease is never looked into. Acute traumatic infection treated by poltices and mud-plasters until the suppurative process destroys irreparably surrounding tissue, perhaps a joint, when a bistory introduced and withdrawn would have perfected a cure by drainage alone.

Until physicians quit treating surgical cases medically, and surgeons cease doing a Halstead operation for goloctoceles, the relation between surgeon and physician will be no more harmonious than at the present time. THEN WHAT SHOULD THE REMEDY BE? A better knowledge of each other's work. A physician should study surgery and see as many operations as possible.

There is no other training in pathology more instructive to us than to watch a case for a few days and then see the pathological changes as they are presented on the operating table. We there recognize how utterly useless the internal administration of medicine is in certain diseases, such as gall-stones, appendicitis, etc.

We also learn to estimate nature's forces in relieving us of pathological conditions, regardless of the medicine we give.

I am not a therapeutic nihilist and hope I never will be so accused. I wish everything used to relieve suffering and cure diseases to receive its just credit and want each agent placed in its proper place.

A surgeon should be a good physiologist. He should be familiar with every organ in the body and its function. It is absolutely necessary for him to be well versed in dietetics and the various phases of digestion and nutrition. He should be thoroughly familiar with the heart and its sounds. He must be a good clinical chemist and pathologist. If he does not do the technical work, he should be so familiar with the subject, that he can interpret the meaning of all things found when examinations are made.

Let us get together and study each other's work and seek the truth. Don't become prejudiced against anything that is beneficial to our patients.

Let us be honest in our convictions and stand up for them.

Then if we ask our state legislature for a law to protect our friends against the practice of known fakirs and fraud remedies, or ask for an appropriation for the maintenance of a State Board of Health to guard our State and protect her citizens from epidemic diseases, we will get it.

We must gain the confidence and respect of each other before we can claim due consideration from others.

PREVENTIVE MEDICINE.*

By W. P. Illing, M. D.,

Chairman of the Section on State Medicine and Public Hygiene, Arkansas Medical Society.

W. P. Illing, M. D., Little Rock.

It is perhaps unnecessary for me to remind the members of this Society of the amazing expansion of our industries in this great State during the past few years; the increase in population, the activities of the new industrial centers, and the awakening of the older and more remote parts of the country, which are little short of marvelous. It behooves us therefore in the midst of all this turmoil to adopt some prophylactic measures as *preventive medicine*.

Preventive medicine is the true objective of our profession. Our duties to the community begin with, and never cease to include, defensive measures against all bodily perils which never cease to assail us. Some of them are readily preventable, especially those which are the outcome of the gross, obvious carelessness of unthinking or selfish people. There is no excuse for sins of omission, particularly when patent to ordinary intelligent observation. That portion of the people who are educated in the principles of hygiene can very well provide and see relief for many of the hurtful and dangerous conditions which invite attention, and we physicians may rely for co-operation to a certain extent upon the good sense which resides in any community. Upon those who are equipped with practical education and experience, the commonwealth must depend to regulate the conditions that make for a continuance of that collective individual health which is the basis of all economics. Laws are made, in most communities, regulating nuisances, acts overt or passive, which distress, injure or mar comfort, or health, or both. These laws are usually of ample scope and particularly to cover the chief offensiveness; but too often they are permitted to become of small or no effect, and so chiefly by the apathy of the people. The tribunal, the court of appeal, is primarily a Board of Health appointed by the municipal authorities; next are the courts of law.

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We are provided with ample legal safeguards, special enactments, which can be invoked. Such, however, is our hurry and absorption in our private matters, that it frequently happens that we become indifferent to the infringements of our clearly defined, as well as our ethical rights. Hence, we suffer, especially in cities and towns, from numerous preventable sources of irritation, strain and impairment of that reasonable degree of tranquility essential to good health.

The pollution of the air we breathe is one of the worst, inasmuch as animals, which we are, depend for integrity upon "*anima*" the breath of life; so if this is vitiated by smoke, noxious gases, effluvia, asphalt, dust and gritty particles floating in the air from unconsumed coal or crushed rock, a blow is struck at the very foundation of our being. Noise is also of importance, excessive sounds made by the rushing of heavy street cars thundering along our streets, jarring our houses night and day, the ear splitting whistle of locomotives and other urban noises are at times almost unbearable. In many of our cities this noise nuisance is reduced to a minimum by municipal ordinances. There should be a statutory enactment providing for local regulations, indicating what shall be done to avoid and abate these nuisances. These regulations should fix proper penalties for their violation, and bestow adequate powers upon the officers clothed with the power of their enforcement.

BOARDS OF HEALTH.

It is difficult to act as guardian of the public health and not antagonize some one. For this reason the total responsibility should not be placed upon the Board of Health as is so often the case. The Board's willingness to support measures intended to safeguard the people is often misunderstood and misjudged by the public at large. The spirit of research should dominate the work of the Board of Health, and any Board where this spirit is lacking is a source of danger to the public over which it presides. This Board should reign supreme in the community in matters coming within the legitimate scope of their action, as responsibility without proper authority is farcical. The Board of Health in this State is such in name only, as it has not a penny with which to carry out its work.

SCHOOL HYGIENE.

Our schools should adopt a modified curriculum adapted to the physical capabilities of those pupils whose eyes are defective, or who may otherwise be in feeble health. Their hours of eye and brain work should be arranged through the day with intermissions for exercise and recreation. The eyes of our school children should be examined by a competent man for trachoma, before

they are admitted as pupils. The teachers should be instructed by a competent man to make a crude test for refractive errors, inasmuch as we have no law requiring a thorough examination. These crude examinations can be made at a comparatively small cost to either the pupil or the school board. Particular attention should be given to the direction from which the light falls upon the desks of the pupils; the light should always be admitted to the school room from the rear, and the desks should face a solid wall.

It is also a fact that infectious and contagious diseases, such as diphtheria, scarlet fever, measles and whooping cough, have each their own ocular significance. Paralyzed muscles, conjunctivitis, keratitis, iritis, inflammations, and the serious results that we have seen follow the course of the acute infections, should be reported to the authorities as an additional argument for the prompt establishment of medical inspection in all schools, where it not now in force.

Any poison is virulent or harmless in proportion to its dilution or concentration. The air of a school room is necessarily vitiated by the exhalation from the lungs and bodies of the children, so we can see how vitally important it is that the ventilation of school rooms should be as perfect as possible.

TUBERCULOSIS.

According to the Census Report for the year 1890, the death rate from consumption was in proportion of more than twelve thousand to one hundred thousand deaths, or it may be said that one death in every ten is caused by this dreaded disease which is far more fatal to humanity than any other affliction. Many of our insane hospitals, orphan asylums, homes, reformatories, penitentiaries and prisons are filled with the indirect result of tuberculosis. With these facts staring us in the face can there be any doubt in the minds of the members of this Society that the State should establish and maintain an institution for the treatment of tuberculosis where both the rich and the poor could be sent? Each municipality should pass a rigid law making it compulsory for all physicians residing in their particular community, to report every case of tuberculosis as soon as discovered to the proper authorities, who should cause the patient to be removed to this sanitarium and the premises thoroughly fumigated. All efforts towards the eradication of this disease will avail naught unless the household dust from the infected premises is carefully destroyed. It is a fact that scientific tests show that the germ of pulmonary tuberculosis, which has been within doors for sometime, is capable of retaining its effective properties for an indefinite period of time. Schools, churches, hotels, as well as all private buildings and busi-

ness houses, should therefore be carefully fumigated and thoroughly cleansed after having been exposed to infection.

CONTAGIOUS HOSPITALS.

As our conception of contagion increases, so does our ability to cope with this gigantic force increase until today we are far in advance of ten years ago. As our knowledge grows, so do our needs grow, and today we accept as necessary treatment auxiliary forces which would have been regarded as useless or ridiculous a few years ago. Will the increasing knowledge of the infectiousness of tuberculosis enable us to fight off this great White Plague?

The inevitable result would seem to be, if I am not too optimistic, that the day will come when tuberculosis, scarlet fever, diphtheria and other infectious and contagious diseases, will be largely under control, and their spread will be entirely through negligence.

Along this line of advanced thought comes the question of hospitals for contagious diseases. The idea of sending a patient to a hospital for contagious diseases, is rather a recent one, and the mind of the general public has hardly grasped it. Cities should be encouraged to build hospitals of this character. There is not to my knowledge an institution of this character within the borders of our State, other than a pest house for small pox. This is a fact much to be deplored.

INEBRIATE ASYLUM.

The State of Arkansas should establish and maintain an institution for the treatment of inebriety in its varied forms. Unfortunately this sad affliction is greatly on the increase, and if such an institution were in operation in this State, I am sure it would result in a vast amount of good and cause the reclamation of many men.

STATE HOSPITAL FOR MENTAL AND NERVOUS DISEASES.

The crowded condition of our hospital for mental and nervous diseases calls for more room for our insane. If the people of this State could be made to see the great good that could be accomplished if the acute and chronic cases could be housed separately, and epileptics colonized, I am sure they would not hesitate to enact proper laws for such a change. Our present institution is admirably managed under the law as it stands today, and is an institution of which every citizen of our commonwealth may well be proud.

PURE FOOD LAW.

I will not endeavor to say anything about the status of the present pure food law as this will I am sure, be fully covered by my worthy colleague. Dr. C. R. Shinault, who has been a tireless worker in this behalf and who will give you his experiences in working for medical legislation. I will say, however, that I believe that every municipality

should closely guard the health of its residents by carefully inspecting all meats and milk, and also by keeping a watchful eye on its water supply. The question of sewage should be most carefully looked after, and all cesspools should be filled, thereby destroying the principal breeding places for the mosquitoes which are, as we are aware, disseminators of disease.

STATISTICS.

A concerted effort should be made by all physicians in the State to make an accurate report of all births and deaths, so that the statistical report of the State could be relied upon. Unfortunately this is a matter sadly neglected, much to our detriment.

POLITICS.

I believe that the doctor should be an active factor in politics as Dr. Chas. A. L. Reed, of Cincinnati, Chairman of the Committee on Legislation of the American Medical Association, so ably advocates. It often happens that the doctor on election day, will not even go to the polls to cast his vote, and for this reason when we ask for legislation at the hands of the Legislature or favors from the officers of the State we are given the cold shoulder for the fellow who votes. I believe were the medical profession to work in a concerted manner we could accomplish much, and especially in the passage of medical laws. I invoke the hearty co-operation of every physician of this State along this line.

SEXUAL HYGIENE.

I would recommend that the Councilors at each session formulate, for publicity, explanations of such questions tending on public health and hygiene as would be suitable. I notice in the Journal of the American Medical Association, of recent date, where the Ottawa County Medical Society held a public meeting for men, particularly college and high school students and young men just entering business life. The discussion was on the prevalence of disease contracted through immorality and the best method for its prevention. This matter of education in sexual hygiene is of vital importance to our young people, and lectures on this subject should be a part of the curriculum of all schools and colleges for young men. Sexual hygiene and physiological functions should also be gently touched on in all schools for young women. Such talks as were recently given in this city by Dr. McCormack, of Bowling Green, are conducive of much good.

VIGILANCE COMMITTEE.

I also believe that this Society should provide for a committee known as the Vigilance Committee

whose duty it should be to investigate the numerous quacks that infest our State. Each county society should select three men as such committee, who should be men of honor and integrity and good judges of human nature. One of the duties of this committee should be the ferreting out of the professional abortionist. I would suggest that this State copy the circular letter issued by Dr. J. N. McCormack, Secretary of the State Board of Health of Kentucky, which is as follows:

CRUSADE AGAINST CRIMINAL PHYSICIANS AND
DRUNKARDS.

To the Medical Profession and People of Kentucky.—The infamous practice of criminal abortion, infantile murder, to speak plainly, dangerous to the health and lives of women to an extent not generally realized, and a constant encouragement to immorality, has become so common in recent years, even with married women in the higher walks of life, often church members and otherwise respectable, that the General Assembly has made it the solemn duty of the Board to revoke the license to practice of any physician proven guilty of this horrible crime. After full consideration the Board has decided to take up this work in a systematic way and to discharge the solemn duty imposed on it without fear or favor. In the very nature of things this is one of the most difficult of crimes to prove, and for this reason it has been decided earnestly to invoke the aid of the county medical societies, boards of health, court and other officials and the people. We promise to make a prompt investigation of every case reported to us, and to cite physicians, high or low, to appear before the Board for trial whenever the evidence warrants it. We appeal to the medical profession in its organized capacity, and to all officials and good citizens, to aid us in the enforcement of this wise and timely law.

It is also made the duty of the Board to revoke the license of any physician who becomes addicted to the liquor or drug habit to a degree which disqualifies him to practice with safety to the people. No drunkard or opium or cocaine habitue is fit to practice a vocation where health and life are constantly dependent on acuteness of intellect or correctness of judgment. This is a mild offense compared with the cowardly murder involved in every criminal abortion, and this phase of the law will be used to secure reformation wherever this is possible. Copies of this letter will be sent Kentucky, and we ask the assistance of all good to every newspaper, physician and official in people in the work.

MEDICAL LEGISLATION.*

By C. R. Shinault, M. D.,

Member of the Committee on Medical Legislation,
Arkansas Medical Society, May, 1907.

Mr. President and Members of the Arkansas Medical Society: Since our last annual meeting I have had nothing to report in the way of special favors from the law making body of our state.

As you know, this was the year for the Legislature to meet, and apparently there was much in store for the good of the people at large along the lines in which we are interested, but by the time the Legislature had adjourned, the Committee on Medical Legislation found that it had come out at the same hole at which it went in, and like the negro preacher who passed his hat around and it was returned to him empty, we "flunked the Lord that we got our hat back."

The first effort we made in vain was an attempt to suppress the patent medicine evil which today is responsible for more deaths and a larger number of criminals and invalids than all other vices combined in the State of Arkansas.

I am sure we were conservative in what we asked for, as we only asked that the ingredients be published on the label, and that certain nostrums containing detrimental and deadly drugs, such as morphine, were not to be sold at all. This at first seemed plausible to the majority of the legislators, and not especially objectionable to the majority of the druggists. However as the time rolled on, many of the druggists argued that while they thought it wrong, their living depended upon it, and that if the bill became a law, it would put many of them out of business for the good ones, for example—our old friend Castoria, which has always published its ingredients—would remain, while the real humbugs would take to the "tall uncut."

We know it to be a fact that a certain per cent of the offspring from alcoholics are mentally unbalanced in some way; epilepsy being one of the most dreaded of the maladies that can be handed down from a drunken father to a child. We know it to be a fact, also, that ministers, (not all) are chief among those who help "boost" these nostrums, and as they speak often from a spiritual standpoint, their words are well weighed and special inducements offered for their testimonials. I am sure they are conscientious in what they write, but are often laboring under a drug (perhaps alcoholic) delusion.

Since we all know the evils of such compounds, why should we not, in our efforts to suppress such evil, receive the same support from the pro-

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hibitionist as we do when we endeavor to suppress the "straight goods", which in many instances is purer than the so-called Woman's Friend and Winslow's Soothing Syrup, Peruna, etc., which often contain alcohol or opiates?

Every prohibitionist and minister of the Gospel should be from Missouri when it comes to dealing with patent medicines; that is, if they wish to steer clear of alcohol and other drugs which tend to degeneracy in their progeny, should ask "to be shown," and there is but one way for this, and that is to publish the contents of the bottle and impose a heavy penalty if misrepresented. Prohibition should embrace all such as this, for a sinking ship will certainly continue to sink unless you chink all the holes.

The offspring of Peruna drinkers are more apt to be neurotics than the straight whiskey drinker's progeny, for in many instances, the former are the result of a double-barrelled discharge (father and mother), while the whiskey straight as a rule only comes from the father.

Now if every minister can be convinced of this and induced to work according to his convictions, regardless of some brother church member who is in the drug business, just as he does with the whiskey evil, I believe it will go a long way towards suppressing this evil.

The next power which is usually against us is the newspapers, and it is a dreaded power with but little hope of them ever being on our side, for we have not the funds to go the patent medicine combination one better and get them on our side. It is a known fact that there is a patent medicine fund coming from the various millionaire concerns that have a corner on nearly every newspaper in the land, and it is stipulated that their contracts are to be cancelled if they should be guilty of publishing anything that would tend to favor legislation against patent medicines.

I do not know what remedy to offer here. It has been suggested that we launch and control a State paper for this purpose; call it the "Organ" and make our efficient Secretary the "Grinder."

Personally, however, I think a better plan for us would be, if possible, to get into harmonious relations with the newspapers, for it is not the disposition of organized medicine to enter into opposition with any power for good, and what force is more powerful than the public press?

Humbug, trickery, and all arts of the trickster shun being exposed in the newspapers. We have all recently witnessed the effect upon the country at large of the crusade begun by Collier's Weekly and the Ladies Home Journal.

Another suggestion that has been offered and is being successfully carried out in various places, is a drug store with a stock company of doctors,

where patent medicines are discountenanced. This is a matter we should defer for the present, as all the druggists over the State did not oppose the bill, and we live in hopes of eventually having them all see their way clear to support such a measure, since apparently the majority of them did not hesitate to acknowledge the evil of secret nostrums, but opposed the bill on the grounds that in many instances it would put them out of business, since they were not prepared for the change, and in reality had it not been for the herd of patent medicine men coming to our city and camping on the ground with their attorneys, the druggists of our State would not, as a rule, have been so strongly opposed to the bill.

However, as I said before, I do not believe for reasons given, that they would be put out of business, so perhaps by the time our lawmakers are again in congress assembled, the doctors and druggists may be in perfect harmony and present conjointly, a bill that shall be for their mutual benefit and the good of the people at large.

Still, it matters not how much or how little of this we may take seriously and put into execution; to expect much, it will require a more concerted action on our part and increased numerical strength. Therefore, I am more convinced every year that we should take in all undergraduates who are reputable; and certainly an under-graduate should not be disreputable just because his finances did not carry him through, and yet felt that he had been "called" to practice.

Take him in, for it is he, more than any other, whom the politician respects at voting time. Just why this is true, I do not know, unless the politician labors under the delusion that he is less busy and has more time to stop and talk and give his opinion in allopathic doses as to who he thinks is the poor man's friend.

I do not mean for us to take in a disreputable under-graduate, and I am strictly opposed to altering the law in any way as regards "fads" or "isms," as they are permitted to practice what they please by passing our board, showing that they are intelligent practitioners.

Gentlemen, political bluffs do not go, the politician would be a fool not to study the meat and bread side of his profession and he is going, as a rule, to vote the way the majority of his clientage desire, and there is but one salvation for us and that is to get nearer together, be broader minded, however not reckless to the extent of taking the "absent treatment" fellow for he is no more a part of us than the chaff is a real part of the wheat, but increase our ranks by taking in every reputable under-graduate, for, they are the workers in politics.

Some may say, keep out of politics, that our forefathers considered it a disgrace, etc., but times have changed since the days of our forefathers, and we are compelled to do many things now that were not indicated then, and in the light now vouchsafed men and things appear very differently.

As it is now, we are not strong enough, nor do we understand each other, or the workings of organized medicine as we should. Everything should be turned over to the Committee on Medical Legislation, and left with it as to whether it is thought best to introduce a bill or not, and this committee should know well its business.

One of the first obstacles we had to contend with this year, was the presence of several who had bills to introduce. They had been advised by their home physicians to introduce the bills, and more than one doctor had such bills to introduce.

Before the legislature had adjourned, we began to realize that we would do well to keep what we had, for the official Patterson-Black bill was sidetracked for the (unofficial) Greenhaw bill, whose object was to defeat the Patterson-Black bill, and with this end in view, it was conceived in the iniquity of the patent medicine manufacturer, which like the nit-fly, deposited his egg and departed,—it impregnated the local druggist, and at the end of gestation Greenhaw became the accoucher.

The Greenhaw bill passed and may be of slight service to the people. However, we, the official committee, do not care to claim any of the laurels, for it spirited away our legitimate child and put in its place a little changeling, whose real father is unknown, bearing the traces, as it did, of coming from so many patent medicine sources, the accoucher gave it his name and thus gave many legislators a chance to say to their constituents, that they voted against patent medicines. Mr. Greenhaw can have all the honors and divide honors, if he likes, with the patent medicine men, for at best it is a poor deformed little child that no one, save its father, can love for a very long period.

The State Board of Health Bill was put into the hands of several representatives to be introduced, and as many times it was, after due consideration, returned.

The last blow, though by no means would it have been the least, in its damnable way, was the Weltmer Magnetic Healing Bill under the catchy name, "Mental Therapeutics." This bill gave us a great deal of trouble, as it passed the house by an overwhelming majority, several doctors having voted for it, and it required a great deal of exertion to keep it down in the senate. I might say right here, that Mr. Barker, the father of the bill, must be magnetic indeed

to have passed the bill through the house by such a large majority. Indeed, the absent feature of the bill wended its way into the senate and caught several of our most able senators.

This was a bad year for us as regards medical legislation, for as I have said before, we have not been sufficiently strong to command the proper respect as a professional body from the body politic, and as the main batteries were, from the start, planted either for or against two important civic measures, and as these battles were not concluded until the latter part of the session, such measures as ours were considered of minor importance, and were trampled under the feet of the war horses, or used for swapping material for votes, and the Patterson-Black bill though ably defended by Senators Patterson, Black and others, when called to a vote, faded into oblivion like snowflakes on the water.

We must make our ranks stronger before we can hope for much, for we have not the finances to control newspapers or pay for time consumed in watching the legislature as do other organizations. So to increase our ranks is the next cheapest method for us, while financial methods are the cheapest for the patent medicine men, and you know it is perfectly natural for us all to want to do things on the most economical basis.

So let us think about two things until we see the results of the 1909 legislature. First, a doctor's "Organ" with our efficient Secretary as "Grinder." Second, a drug store with a stock company of doctors, where patent medicines are discountenanced. The object of the paper, of course, would not be to boycott other papers, but be a medium for publishing facts, warning the unsuspecting public against injurious drugs, etc., championing our cause during the general assembly.

In conclusion, let me insist that we increase our ranks by taking in the reputable undergraduate, for he is a part of us, even though his trousers might not cover his ankles.

DISCUSSION.

Dr. Bauduy: I do not rise for the purpose of discussing the learned essayists's paper. I listened to it with the greatest interest. It is a matter that ought not be passed over by this society, as I think it is of paramount interest to us that we should take up this question of patent medicines and nostrums. The pure food law fortunately is a great boon to us, whereby we are able to know the amount of opiates and alcohol in these different preparations.

It is really surprising in the general practice to note the number of intelligent mothers who will feed their crying infants upon such a nostrum as Mrs. Winslow's Soothing Syrup, a preparation that has been on the market as long as I have been in

the practice of medicine, some twenty years. They give the baby every time it cries a dose of Mrs. Winslow's Soothing Syrup, and the consequence is, I assure you, that I have come to treat many infants that have been put in the opium habit through the negligence of mothers and through the nurses in their efforts to pacify the baby—not always through the ignorance of the nurse, but through their efforts to pacify the baby. It would be a great thing if the mother did not leave to the nurse so much the administration of drugs to the child. The hour is late, but the subject is one that should not be passed over without due consideration. I would like to state that it is a peculiar fact that so many of our ministers and bishops will permit their pictures in the papers endorsing such preparations as Peruna, preparations that we know are stronger than whiskey, containing more alcohol than the ordinary liquors passed over the bar. These men who endorse them, being bishops, have done infinite harm to the public, and, as I have said, it is a great surprise that such men will put themselves on record as endorsing these preparations—preparations which, when given to the patient, will create drunkenness, where they contain alcohol. I have seen cases that have not taken alcohol for years that will start on Hostettters Bitters and such remedies, and get on, I was going to say, a "cheap" drunk, but in the end an expensive one.

I have forgotten just where I read it, but some sage or philosopher said: "If all the ministers were thrown in the sea it would be better for mankind but worse for the fishes. (Applause.)"

Dr. Turck: The importance of this subject is so great that it is surprising sometimes that we medical men do not deliberate more in our sections, as well as in the general session, on the question of food, a question over which we have control. Medical men control the question of food largely in this country. Medical men in their homes, in the homes of their patients, control to a large measure the question of dietetics, but in our medical schools we have no special chair on "dietetics" and the men who graduate from our schools go out into the community without a sufficient knowledge of dietetics, the preparation and composition of food, and hence most of it escapes them in a measure. I mean it escapes their attention. They are not as alert on the question of dietetics among their patients as they are on other things. Therefore, the patient having no other source of information except the physician—the community in other words—these foods are given out to the public because there is no one watching.

Take the animals, for instance like hogs and cattle. We have an Agricultural Department in the United States that has made investigations

as to the proper food for hogs and cattle, and, as a result of these investigations in the laboratories that dot this whole country, bulletins are issued from these laboratories and sent to the farmers, and they take up these bulletins, and read them. What do they find? First, all those foods that are poisonous to the animal, poisonous herbs that the cattle may eat, what they are composed of, and how to determine them. Then comes the preparation and composition of the food, then the question of adulterants, and how they shall be able to detect them. You see, then how the farmer becomes thoroughly competent to judge as to how he shall feed his hogs and his cattle. What is the result? This country is ahead of the world in the knowledge of the proper feeding of hogs and cattle. Why? Because a hog has a value of \$6.00, and it is a commercial proposition, and the result is that the human being, who has no such value as \$6.00 to the state, is left in his ignorance to the caprice of designing manufacturers. What is the remedy? We shall take the lessons that we have learned in the methods that are adopted in the feeding of cattle and in the feeding of hogs. The dissemination of knowledge by bulletins is a very good idea, but it must be of such character that it can be issued as a bulletin to instruct the people at large. It must be in the same manner in which the farmer receives his knowledge as to the feeding of hogs and cattle. Every mother will read every bulletin she can get on the care of her children. She will be most interested in how the baby shall be brought up and reared. She will read them with a great deal of thought, and show them to her husband and educate him. Then with that knowledge and that education, will the medical profession have much trouble in bringing these questions before the public? Not much. It is simply a question of the knowledge that the people must obtain. Where shall they go? There is no other source except through the medical profession. The people the medical profession that this knowledge shall have no other chance and no other hope presented with the same freedom that the Agricultural Department gives that knowledge to the farmer for the care of his hogs and cattle.

I am here to advocate strongly a more thorough interest in the subject of dietetics and all its branches, and that includes, of course, under the food law, all adulterations and drugs. If a person goes deliberately to a store and buys a drug, he alone is responsible. I don't feel always that we are holden because some of them deliberately go and buy a poison, but it is different when we serve food before them. A food should, first of all, be pure, and it should be under the direction and control of the men who know, and we have

no other hope or source for that information except through the medical profession, therefore, we are responsible. We must organize and disseminate this knowledge, and make it strong, so that the mothers and fathers and the family shall be educated in the laws that govern dietetics. (Applause).

Dr. Vaughter: I enjoyed the paper very much. I do not wish to discuss it, but rise to make just one remark. I do not believe all reputable ministers have endorsed Peruna or Hostettters Bitters, or any of those alcoholic drugs. I think that if you look up their records, you will find they are quack ministers or negro preachers. We have here Rev. Andrews of the First Methodist Church, Little Rock, and I move that he be given the privileges of the floor.

Dr. Shinault: I am perfectly willing to have Rev. Dr. Andrews speak, for I assure you that I have the very highest regard for him, but it should not be forgotten that I said all ministers were not guilty of giving their endorsement to these nostrums, and gladly acknowledge Dr. Andrews an exception. But I do say there are many reputable ministers who do give their testimonials of the wonderful efficiency of these patent medicines, and I have nothing to retract. (Applause)

Dr. Thibault: There is only about half of Dr. Shinault's paper that I heartily concur in, and that is the question of education. It is a good thing to get up and talk about the rottenness of the Arkansas legislature. It is rotten enough, but there is something in our own society that we ought to weed out. There are gentlemen in this society who met Dr. McCormick when in the state, shook hands with him, and were glad to see him, and who come here and decry the giving of patent medicines and the use of them, but whose names are on the front page of a Journal in this State whose back pages are devoted to the exploitations of such drugs as Antikamia, Sanmetto and Reacock's Bromide. Three members of this society have their names on the front page as editor of that Journal. They come here and talk

about educating the people. The people really educate them. We ought to know better, we do know better, but haven't got the backbone to do better. (Applause)

If there are men in this state or any other state who educate and elevate themselves to where they are capable of teaching the people what is right and what is wrong, why should they connect themselves, for political purposes, with men who neglect their education simply because it is expensive and can practice medicine without an education? What incentive is there for a man to complete his education when he knows when he studies six months and passes the State Board examinations he can come here and be as big a man in this society as the man who has spent four or five years in education and the rest of the time in study? In Lonoke county we often help these men. One man in that county is going to school. They come to our meetings and listen to what we have to say. We offered to take their practice while they were gone free of charge so that they might go to school.

All the reputable colleges in the United States are now advocating a five-year instead of a four-year course. They realize that in four years a man can't get a good medical education. These men who are willing to go out among the people and practice without an education, jeopardizing the lives of their patients, when they know they are doing it simply for the money that is in it, are not fit to be in a medical or any other society. (Applause) I would like to see a law of qualification passed that would put me out of the practice of medicine, that would leave only distinguished men in it and I could go to work at some honest labor and make a living. Those men that are not qualified ought to go to plowing or digging trenches. Why should this society stoop to pollute itself by advocating things they know are poisonous simply for the political pull they can get with a few long haired under-graduates who don't know how many lobes there are in the liver.

Dr. Shinault: After Dr. Thibault's remarks, I will say no more.

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MORGAN SMITH, M. D.

Secretary Arkansas Medical Society

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REMITTANCES.

Remittances should be made by check, draft, registered letter, money or express. Currency should not be sent, unless registered. Stamps in amounts under one dollar are acceptable.

ADVERTISING RATES.

A schedule of rates will be furnished upon application.

ADVERTISEMENTS.

Advertisements should be received by the 8th of the month to insure their insertion in the current issue.

CHANGE OF ADDRESS.

Change of address will be made if the old as well as the new address be given.

CONTRIBUTIONS TYPEWRITTEN.

In order to lessen liability of errors, contributions should be typewritten.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

THIS NUMBER CONTAINS A LIST OF OFFICERS OF THE COMPONENT SOCIETIES OF ARKANSAS, THE ARKANSAS MEDICAL SOCIETY AND THE AMERICAN MEDICAL ASSOCIATION.

"SLOW FEVER."

In the report of the proceedings of the One Hundred and Sixteenth Annual meeting of the New Hampshire Medical Society, held at Concord, May 16-17 1907 (*Journal of the American Medical Association*, July 13, 1907), the following is printed under the title:

"THE THREE LONG CONTINUED FEVERS OF NEW ENGLAND."

"Dr. Richard C. Cabot, Boston, said in part: It has impressed itself on me that there are but three long, common, continued fevers of New England, also that there are some of the profession who do not realize that there are but three. As long as that is so, and as long as the facts show that considerably over 90 per cent. of all long-continued fevers do belong to one of three, it seemed to be worth while to emphasize that point, to insist on those three fevers and to speak of their diagnosis. I mean by "long fever" a fever which lasts two weeks or more. A continued fever, of course, is a fever which does not touch normal at any time during 24 hours, and by fever itself—going simply by temperature measurements—any disease in which the temperature is continuously above 99 F. Statistics show that there are but three long-continued fevers of New England—typhoid, tuberculosis, sepsis. The clinical records and postmortem examinations of the Massachusetts General Hospital show that 97 per cent. of all cases in which there was a fever of more than two weeks turned out to be typhoid, tuberculosis or sepsis. Out of 784 cases which I studied for this purpose there were 586 cases of typhoid. Sepsis followed with 70 cases, or 9 per cent. Next to these three causes, come the minor affections. The commonest is meningitis. Although it often has a fever which touches normal, it may have a continued fever; and 27 of these cases were cases of cerebrospinal meningitis. Influenza came next with 10 cases. Acute articular rheumatism followed with 10 cases. Then came 5 cases of leukemia and 4 cases of malignant abscess with fever; then cirrhosis and gonorrhea, two cases each; and then a number of other diseases.

In the diagnosis of these fevers, the first and most important thing to realize is that there is no such thing as simple continued fever, or slow fever, or low fever and gastric fever. Among those seen in consultation, a considerable number have been diagnosed as some one of these things.

Another important fact is that, aside from cases brought in from the tropics, there are no malarial fevers in New England which run a

continuous course. They are all intermittent fevers which yield readily to quinin. There are no long-continued fevers due to hysteria, neurasthenia or any other affection of the mind, and none due to constipation. Mistakes are often made in this matter by paying too much attention to the symptoms and not enough to the signs; too much attention to what we find on examination. Many mistakes can be avoided by an examination of the blood. In examining for tuberculosis, one of the surest ways of stirring up rales is to make the patient take in full breath; let it all out, and then cough at the very end. It still needs to be said that typhoid fever in the majority of cases presents the picture of a patient who has fever and nothing to show for it. Typhoid is not a disease of the intestines at all, any more than diphtheria is a disease of the throat. It is a disease which has lesions in the intestines but in which bacteria are circulating through every organ in the body. The blood test is most important.

Dr. Wm. T. Smith, Hanover, expressed the wish that Dr. Cabot's suggestions might be incorporated in the text-books, also that physicians might have, free of charge, blood examinations done by the state laboratory."

It is a far cry from New Hampshire to Arkansas, nevertheless, the words of Dr. Cabot will apply with as much force in our own State where there are malarial fevers as in New England. If to the knowledge that we do have malarial fevers in our State we add the dictum of Osler that "*a fever that resists quinine is not malarial*," we have gone a long way on the road that tends to correct diagnosis of the misnamed "slow fever" of Arkansas. Much might be written as to the reasons, or rather lack of reason, which lead so many physicians in certain districts in Arkansas to apply the term "slow fever" to so many cases that are frankly typhoid, and to a much larger number where the real disease is unknown and the unscientific term is simply used as a cloak for ignorance and indolence, or as an emolient for the tender feeling of those who contend that "we never have typhoid fever here." The paper suggests a practical means of reaching a desirable

end, and without further writing on the scientific aspect of the subject we suggest that the case be taken up in every county society in the State of Arkansas and resolutions adopted similar to that adopted by the Arkansas Medical Society at Texarkana in regard to "scarlet fever" and "scarlatina." It is suggested that these resolutions should declare that there is no such disease as "slow fever" known to the medical profession; that the use of such a name is unscientific, unnecessary, and in every case its use is an evidence of ignorance or indifference on the part of those who persist in using such a term.

Nor should the efforts of the enlightened members of the societies cease with the adoption of formal resolutions. Members of the intelligent class should first try to convert the sinners from their ways, and failing in this, they should diligently endeavor to educate the people to a realization of the fact that the use of the term is reprehensible in every respect, and those who continue to apply it are not to be classed as the best, or even good doctors.

L. P. Gibson, M. D.

THE BOUND JOURNAL.

If the bound copies of the Journal for 1906-7 were subscribed and paid for by those for whom they were printed, some of the financial embarrassment which is now annoying the Secretary would in a measure be relieved. Last year the Committee on Publication, in order to make a satisfactory contract for the publishing of the Journal, had to agree to place an order for not less than four hundred bound volumes. This agreement was entered into rather willingly, for the belief was entertained that there were at least that many members of the Society who would be glad to have their State Journal in book form suitable for the library; and especially so when it was found that they could be furnished for only eighty cents a copy. Less than fifty of the original number have been subscribed for and delivered, the remaining ones lie stacked in an unsightly heap in the Secretary's office, there to become a prey of moths, bugs and book-worms. These books represent assets of the Society, but so long as

they remain uncalled for, they have no value. The Secretary, with the approval of the President, Dr. C. C. Stephenson, is sending these books out to the Secretaries of the various component societies, properly apportioned to each county, with the request that they be disposed of to their members. It is to be hoped that they will be promptly taken and paid for, and the receipts for the same be returned to the Secretary at once.

Resolutions to Amend the By-Laws

The following resolutions were introduced in the House of Delegates by Dr. F. T. Young, of Springdale, and under the law will lay over until the next annual meeting, at which time they will come up for consideration.

RESOLUTION NO. 1.

WHEREAS, There seems to be a necessity to make provision for membership of non-graduates in county medical societies, therefore, Be it

Resolved, That the following clause be added to Section V of Chapter IX of the By-Laws of this Society:

“Non-graduates who possess all the other qualifications for membership, may be admitted to associate membership in county societies. Such members shall not be entitled to vote or hold office in the county societies nor to become members of the State Society, but shall be entitled to all the other rights and privileges of membership in county societies.”

RESOLUTION NO. II.

WHEREAS, Some of the members of the Arkansas Medical Society believe that an injustice may at times be done both to this Society and to certain individual members of this Society, by Section IV of Chapter V of the By-Laws, and

WHEREAS, We believe that too many restrictions on the free action of this Society and its House of Delegates are wrong, therefore, Be it

Resolved, That Section IV of Chapter V be totally expunged from the By-Laws of this Society.

Department of Therapeutics

By C. E. Witt, M. D.,

Professor of Materia Medica and Therapeutics,
University of Arkansas, Medical Department,
Little Rock.

Nitro Glycerine.

On account of the frequency with which nitroglycerine is employed as a cardiac stimulant, attention is called to its physiological action as stated by Hare, who says: “Because this drug relaxes arterial tension and so relieves the heart of a certain amount of labor in cases characterized by high arterial tension, thereby doing good when the heart is tired because of the labor required of it, many physicians have come to employ it as a cardiac stimulant in acute diseases without high arterial tension, and there can be no justification for such use of this drug, for it is not a cardiac stimulant.”

Colchicum Poisoning.

Colchicum poisoning is one of the most painful, slow and hopeless poisonings known, and a man taking as much as an ounce of the wine of the root or seed is almost inevitably doomed to a terrible death.—Hare.

Post-operative Suppression of Urine.

Sparteine Sulphate in one to two grain doses, hypodermically given, is recommended by McGuire, for the prevention and cure of post-operative suppression of urine. This drug slows the pulse, raises blood pressure, and acts as a powerful diuretic.

Scopolimine-Morphine.

Some of the advantages claimed for the exhibition of Scopolimine-Morphine preceding general anesthesia, are,

(1st) It produces a tranquil, drowsy condition; (2nd) a great deal less of the anesthetic is required; (3d) the dryness of the throat and fauces is of great advantage, especially when ether is the anesthetic used; (4th) the patient usually sleeps three to four hours following the operation, and the smarting, burning pain of the wound ceases before consciousness is restored; (5th) post-operative vomiting is greatly lessened.

Cough of LaGrippe.

For the frequent and severe cough of La Grippe, Makenzie recommends the following:

R/

Morph. hydrochloride.....gr. ss.
Apomorph. hydrochloride.....gr. 3-4;
Ac. hydrochlor. dil.,.....gtt. xxx
Sys. prun. virg.,.....fdr. iv;
Aq. destil., q. s., ad.....foz. iii
M. Signa—One teaspoonful occasionally.

After Pains Due to Clots.

Cotarine hydrochloride, gr. i., and ergotine gr., v., every two to three hours, is recommended by Potter for after pains when due to retained clots.

Some Facts about Quinine.

1st. Quinine hydrochloride is soluble in 1:18 of water, and contains a high percentage of the alkaloid.

2nd. Quinine bisulphate is soluble in 1:85 of water and contains less alkaloid than the hydrochloride.

3d. Quinine hydrobromide is soluble in 1:40 of water.

4th. One grain of quinine tannate contains $\frac{1}{4}$ grain of the alkaloid.

5th. One grain of quinine sulphate contains $\frac{3}{4}$ alkaloid.

6th. One grain of quinine bisulphate contains $\frac{3}{5}$ grains of the alkaloid.

7th. The tonic dose of all the salts of quinine is from 2 to 4 grains, and the anti-malarial dose from 4 to 60 grains.

Magnesium Sulphate in Epididymitis.

A saturated solution of magnesium sulphate is highly recommended by good authorities in the treatment of epididymitis. The patient is put to bed, the scrotum elevated and wrapped in gauze saturated with the solution. It is claimed that the pain, soreness and swelling are relieved in a few hours.

For Burns.

The following is recommended for burns:

Lead carbonate,.....lb. i;
Pulv. acaciae,.....oz. vi;
Sodium bicarb.,.....dr. iii;
Linseed oil, q. s., to make a creamy paste.

Sig.—Apply on strips of cotton, lint or gauze.

Communications
**HARD TO MAKE IT CLEAR WHEN TO BEGIN
THE TREATMENT OF SYPHILIS.**

Hot Springs, Ark., July 1, 1907.

To the Editor:

A short article of mine read before the Arkansas Medical Society last May advising "the attack on the enemy" before its forces have been amassed, under title of "When to Begin the Treatment of Syphilis," was published with the discussion in the JOURNAL last August and has just come to my notice.

The article was, when read, discussed by seven gentlemen of the profession, all of whom with admirable loyalty to text-books and due deference to an old dogma or two, lost sight of or never saw at all the main point driven at in the article. It was not a lack, I'm sure, of normal perception

on their part, but rather was it due to my unfortunately weak style of rhetoric. I'm sorry. In the paper I said: "When called upon to advise a patient who has a sore not clearly herpetic or harmless, but one of suspicious character and following illicit intercourse or possible infection, the physician should at once take the position of the patient's medical adviser, not his moral or social comforter. Advise to take advantage of the doubt and to begin at once with the mercurials and *push to point of toleration* while the infection is *undeveloped*." "If mercury be the *specific*, it will kill the disease quicker and more efficiently before the forces of the infection are amassed than it will afterward, and, take less of it to do so." The physical ravages of syphilis are so great, so subtle and so dangerous to the person afflicted and to the families in contact and to the communities contiguous that one man's feelings or one man's condition should not be considered paramount. Nothing short of prompt action on the part of the doctor in instituting immediate specific treatment in *suspected* or *doubtful* cases will ever abate this happiness-destroyer that is rife in the land. Of course if the specific micro-organism is ever definitely pictured to us, so that all of us, ignorant and cultured alike may be enabled to read, and if we all decide that mercury is the specific remedy that will destroy the micro-organism, the desired abatement in the spread of the disease syphilis will be more easily accomplished; but such *desideratum* is so far distant! My paper was read before the members of the Medical Society of my own State, hoping that they would consider the point made, and study how widely it affects the *measures for prevention* of one of the most loathsome and awful afflictions to which flesh is heir; I trusted to them to take the matter up, consider it before speaking in haste. But seven gentlemen had to burst with text-book utterances prematurely. *None* since, apparently, has *thought* of the matter.

Is vaccination pursued for the benefit of the individual or for the protection of the community? Both perhaps, but which is of the greater import to the public to whom we are servants? Are warning flags of infectious diseases, such as diphtheria, small pox, yellow fever, etc., displayed for the benefit of the afflicted *individual*? For the benefit of the *community* are they not? Then why should not *in time of suspicion*, the man or youth or strumpet, be restrained by the use of mercury directed by the mind and hands of a rational doctor from infecting or attempting to infect, whether innocently or otherwise, friends, consorts or communities among whom they are permitted by professional parole to roam.

What right has a doctor to give a *doubtful* case of this type thirty or sixty or ninety days to roam

at large, in which to possibly spread an evil disease so doubtful of diagnosis and so damnable in dire effects that even *he himself* is puzzled in the one aspect and in the other, *does not know* when to begin to treat.

Put them all on mercury, and I believe the transmissibility is modified if not impossible. There seems to be a horror in the minds of most of the sanest doctors who have taken issue that unless a man has syphilis he will be eternally and effectually damned by the misused mercury. Is mercury so to be abhorred, when the same sane gentlemen will give calomel and blue mass and other mercurials *ad libitum* during a man's life and think nothing of it. If the doctors who oppose my idea are of the opinion that when you once begin the use of mercury in the treatment of syphilis you must give it daily for the rest of the patient's life or without judgment; and that the mercury once used is never and *can* never be eliminated—then I am wrong. Wrong to talk to the profession at all on this point. I should stick to the text-book idea of humoring the sentiment of the patient and continue to rely upon controlling the "*social evil*" by law.

James Cabell Minor.

District and County Societies

THE FRANKLIN COUNTY MEDICAL SOCIETY, held its regular monthly meeting at Ozark, July 2, 1907. Dr. Turner, the President, presiding. The questions which were sent out to the members in advance of the meeting, were discussed by all present. Four applications for membership were voted upon favorably, the applicants being Dr. C. E. Bennefield, Charleston; Dr. Elmer Hudson, Charleston; Dr. K. E. Hudson, Charleston; Dr. W. J. Kng. Peter Pender. The next meeting will be held on the first Tuesday in August.

THE MISSISSIPPI COUNTY MEDICAL SOCIETY met at Joiner, June 17, 1907, and the following papers were read and discussed: "Inflammation," by Dr. Tracy. "Tubercular Laryngitis," by Dr. H. T. Crawfords, of Wilson. "Ectopic Gestation," by Dr. J. D. Harbart, of Marrie.

THE FAULKNER COUNTY MEDICAL SOCIETY met at Conway, June 20, 1907, with a good attendance. The program consisted of the report of several important clinical cases all of which were interestingly discussed. Dr. G.

L. Henderson, of Greenbrier, and J. H. Downs, of Vilonia, have made application for membership. The next meeting will be held at Conway, July 18th.

THE YELL COUNTY MEDICAL SOCIETY, Dr. A. K. McKenzie, Secretary, reports the election of Dr. Ben L. Cunningham, of Dardanelle, and Dr. M. L. Kirksey, of Chickala, to membership; Dr. J. D. Hart, of Dardanelle, and Dr. C. C. Brown, of Chickala, reinstated.

THE CONWAY COUNTY MEDICAL SOCIETY is reported by the Secretary, Dr. G. W. Ringgold, to be in splendid working condition. Meetings are held monthly and the attendance is good. The membership is now 15 and two new applications to be acted on at the next regular meeting.

THE PULASKI COUNTY MEDICAL SOCIETY met at Little Rock, June 24, 1907. The subject for discussion, "The Business Methods of the Practitioner," developed an interesting and helpful range of discussion, and many valuable hints were elicited from those who participated in the debate. The consensus of opinion seemed to be that a fee-table was impracticable and collectors unnecessary adjuncts to the successful collection of bills. Also the plan of having a rating list of patients was declared not feasible.

THE BOONE COUNTY MEDICAL SOCIETY held a very interesting mid-summer meeting at Harrison, July 2, 1907. A paper entitled "Some Phases of Medical Organization and Work," was read by Dr. L. Kirby. The essayist objected to the admission of undergraduates and licensed physicians who were not graduates of reputable medical colleges to membership in component societies, though he favored associate membership for them. He based his conclusions upon the ground that the standard by which the right to membership should be measured should be professional rather than legal, and since a diploma from a reputable medical college was recognized as the best evidence of professional standing, the same high test should be required for membership in our county societies. Other features of the program was the report of the following cases: "Cancer

of the Breast in the Female," by Dr. J. L. Reich, of Everton; "Fracture and Dislocation in the Elbow Joint," by Dr. H. L. Routh, of Batavia; "Dislocation of the Elbow Joint," by Dr. Geo. Elam, of Bellefonte. Dr. H. H. Kirby, of Harrison, was elected to membership.

THE GREEN COUNTY MEDICAL SOCIETY met at Paragould, June 24, 1907, Dr. Thad Cothorn, of Walcott, presiding. The minutes of the last regular meeting were read and approved. Dr. Lawrence, of Paragould, was elected to membership. The following questions constituted the program:

1. Are the disorders of hepatic function primarily in the liver?
2. Name the sources of intestinal intoxication?
3. Describe in detail Widal's reaction in typhoid fever?
4. Give the different forms of dysmenorrhoea and outline treatment of each variety?
5. Name the disturbances due to the menopause and give general outline of treatment?
6. Give boundaries and contents of Scarpa's triangle?
7. Through what agencies may the body protect itself from the consequences of infection?
8. Give composition of cow's milk? How modify it for infant feeding?
9. What are the indications for surgical intervention in appendicitis?
10. What are some of the reasons why nature does not cure tuberculosis? Does tuberculosis aid in its own cure? If so, how?

In addition to the above, "Some Functions of a County Medical Society," was discussed. Drs. Dickson, Wilson, Kennedy, Graham, Cothorn, Hill, Owens and Cox were active participants in the meeting.

CRAWFORD COUNTY MEDICAL SOCIETY questions for July meeting held at Alma:

1. What causes death in sudden reduction of atmospheric pressure?
2. What is the effect of descent into a caisson?
3. Give causes of endocarditis?

4. What causes the body to float after drowning?
5. Explain the action of elaterium?
6. Describe Biernacki's sign?
7. Describe inanition fever?
8. In a case of typhoid fever, to what condition would you attribute retraction of neck, spasms and twitchings?
9. Give methods of resuscitation after apparent drowning?
10. What is the Drummond light?
11. Describe amaurotic idiocy?

CHANGES IN THE FACULTY OF THE UNIVERSITY OF ARKANSAS MEDICAL DEPARTMENT.

Dr. Jas. H. Lenon was elected Dean, vice Dr. Edwin Bentley, resigned.

Dr. C. E. Witt was elected Secretary, vice Dr. F. L. French, resigned.

Dr. H. C. Dunaway, Professor of Dermatology and Diseases of Reclime.

Dr. A. R. Stover, Professor of Chemistry, vice Thos. N. Robertson, resigned.

Dr. A. M. Zell, assistant to Chair of Pathology.

Dr. William Godwin, assistant to Chair of Bacteriology.

Dr. R. L. Maxwell, Prosector of Anatomy.

House of Delegates

Proceedings of the House of Delegates, American Medical Association, Atlantic City, June, 1907.

(Indebtedness is acknowledged to the Journal of the American Medical Association for the following Abstract of the Minutes of the House of Delegates, of the American Medical Association, held at Atlantic City, June, 1907.)

The House of Delegates of the American Medical Association met at Atlantic City on June 3. Five sessions of the House were held, two on Monday, one on Tuesday, and two on Thursday. The amount of business transacted was larger than has ever previously come before this body. Dr. W. J. Mayo presided over the House on Monday and on Tuesday the chair was

occupied by Dr. Joseph D. Bryant, President-elect, who had been installed at the general session on Tuesday morning. In his President's Address, Dr. Mayo emphasized the growth and development of THE JOURNAL of the American Medical Association, the work of Dr. McCormack as Chairman of the Committee on Organization, and the work of the Board of Trustees. He recommended the consideration of medical education, the work of the Council on Pharmacy and Chemistry, the life insurance examination question, which, he said, should be settled amicably if possible and the advisability of appointing a committee to expedite the business of the House.

The report of the General Secretary showing the present membership of the Association to be 27,515, an increase during the year of 3,879 members.

The report of the Board of Trustees, presented by Dr. T. J. Happel, was a statement of the business of the Association from January 1 to December 31, 1906. The first exhibit was the report of the Investors Audit Company, a bonded and incorporated auditing company of Chicago, which showed the results of the auditing of the books of the Association. The net income for 1906 was \$325,300.35, of which \$103,076.10 were membership dues, \$87,694.97 subscriptions to THE JOURNAL, and \$98,458.85 receipts from advertising. The total expenses for the year were \$293,385.25, leaving a net revenue of \$31,915.10. The various exhibits in the report showed in detail the disposition of the net revenue, the net investment in the Directory inventory of stock on hand, bond account, publication expenses, organization account, Association account, medical legislation account, medical education account, depreciation of property, and treasurer's report. This report appears in full in THE JOURNAL for June 8. The detailed report from the Subscription Department showed the circulation for each week of the year, the weekly average for 1906 being 46,479 copies. Tables showing the number of members and subscribers in each state who receive THE JOURNAL, and the circulation figures for the past nine years were also given. A lengthy and detailed report was

made on all the business interests of the Association and the work in various departments.

The report of the Council on Medical Education showed that during the past year the following work has been done:

1—Collecting, tabulating and publishing the results of state board examinations.

2—Securing, tabulating and publishing statistics regarding medical students.

3—Compiling and publishing abstracts of laws and rulings regarding license.

4—Cooperating with state examining boards, state committees on medical education and medical colleges to secure the adoption of the standard of medical education of the Association.

5—Collecting information regarding medical colleges through reports and through a systematic inspection.

6—Obtaining information regarding proposed changes in medical practice acts and rendering any possible assistance to state boards or state societies in obtaining improved legislation.

7—Obtaining information regarding reciprocity and securing reports of licenses issued on that basis.

8—Collecting all possible information regarding medical education.

This report was referred to the Reference Committee on Medical Education, which, in its report, approved the compilation of tables showing the standing of the various colleges as well as the personal inspection of medical colleges, undertaken by the Council. The committee recommended that all medical schools be annually inspected for the next three years. The committee also approved the report of the Council regarding existing medical schools, emphasizing the following points: the minimum preliminary educational standard to be sufficient to enable the student to enter the freshman class of a recognized university or college; this minimum to be increased as soon as possible by adding physics, chemistry, biology and one modern language; four years work of thirty weeks and thirty hours per week to be regarded as the minimum amount of time for a medical course. The committee endorsed the action of the Council in refusing to recognize night schools or schools conducted solely for profit. It urged the Association to ask the state licensing

boards to make an annual inspection of the medical schools in their state and to refuse to license undergraduates. The principle of reciprocity was endorsed, as well as the annual conference held by the Council, which the committee recommended should be composed of delegates from each state licensing board and from each state medical society. The report was unanimously adopted.

Dr. C. A. L. Reed of Ohio presented a report from the Committee on Medical Legislation, reviewing the work of the committee on the following bills: National food and drugs act; bill for the relief of Dr. James Carroll; bill for the Army General Hospital; bill for improvements in the Surgeon-General's office; bill reorganizing the medical department of the United States Army; the Canteen bill; bill for the relief of the widow of Surgeon-General W. A. Hammond.

The last paragraph of the report is significant of the developing importance of this committee. "It is evident that with the increasing necessity for the formation of certain standard laws, must come an increasing necessity for their uniform adoption and this must call for a harmonious and uniform organization to carry the plan into effect. The chain of influence points directly to the American Medical Association. It would seem, therefore, that we may as well arrange, first as last, for precisely this direction of our labors."

This report was referred to the Reference Committee on Legislation and Political Action, which approved of the work and recommendations of the committee, emphasizing the necessity of taking up state legislation. The report was adopted with the exception of the recommendation regarding the Army Canteen bill, which was omitted.

Dr. J. N. McCormack presented the report of the Committee on Organization, showing that since the Boston session he had worked in Michigan, Ohio, Alabama, New Jersey, Arkansas, Iowa, Nebraska Florida, Pennsylvania, Virginia, West Virginia and Kentucky. Regarding post-graduate courses, he stated that such a course was now being prepared for distribution and criticism, and that it would later on be ready for distribution to county societies desir-

ing to take up this work. He emphasizes the necessity of the Association educating the public to a proper conception of the work of the organized profession. He also reported on the matter of branch associations recommending the organization of seven branches composed of the various state associations. The advisability of state associations meeting in the fall was also considered.

Dr. F. Parl Lewis, Chairman of the Committee on Ophthalmia Neonatorum, showed from the census report the necessity of counteracting this evil. The committee recommended that it be continued and that it carry on its work in connection with the Sections on Ophthalmology, Obstetrics and Hygiene and Sanitary Science, as well as with the Conference of State and Provincial Boards of Health. This report was unanimously adopted.

Dr. John G. Clark presented a report of the Committee on the Establishment of a Board of Public Instruction. This committee, appointed at Boston last year, recommended the establishment of a board of public instruction on medical subjects, which should endeavor to educate the public through the press, through distribution of pamphlets, through public lectures and circular letters.

The Reference Committee on Amendments to the Constitution and By-Laws reported favorably on four amendments. The first one provided that members of the Board of Trustees should not be eligible as members of the House of Delegates. The second provided that the members of the Judicial Council should be appointed for one year instead of one member being appointed each year for five years. The third amendment provided for associate membership for representative teachers and students of sciences allied to medicine not eligible to regular membership. Such associate membership to be on the same plane as dental and pharmaceutical members. The fourth amendment provided that the general officers or the officers of a section might invite representative teachers or students of science allied to medicine and distinguished physicians of foreign countries to attend any annual session and take part in the scientific work as the guests of the Association, such

connection to last only during the session for which the invitation was issued. These four amendments were all unanimously adopted.

The Committee on Scientific Research recommended that the Board of Trustees make four grants for 1907, as follows: 1—Dr. G. F. Reudiger, Chicago, for a continuation of his work on the bacteria of scarlatinal and normal throats; 2—Dr. H. T. Ricketts, Chicago, for a further study on Rocky Mountain spotted fever; 3—Dr. Richard M. Pearce, Albany, for a study on proteid soap compounds; 4—Dr. J. N. Wainwright, Scranton for experimental work on carcinoma.

The Committee on Insurance then reported as follows:

"Your committee begs leave to present as its report:

1—The preliminary report of the committee published in *THE JOURNAL* of the American Medical Association, December 8, 1906.

2—A letter from Dr. Mayo, the President, which accompanies that report.

Further than this notwithstanding various efforts to arrive at other conclusions the committee has nothing further to report and asks that it may be discharged."

Dr. Hubert Work, of Colorado, offered the following resolution:

Resolved, That this Association cordially approves the report of the Committee on Insurance, and urges on county societies such wise and conservative action in accordance with its spirit as will protect the interests of the humblest competent member of the organization.

Dr. R. C. Cabot of Massachusetts, offered a preamble and resolutions providing that control of rabies be placed under the supervision of the Bureau of Animal Industry and of the State Cattle Commission; that all dogs wear a distinctive form collar and that all unlicensed dogs be promptly captured and disposed of; that unrestrained dogs be muzzled for at least one year and that dogs imported from other countries be quarantined for at least one year. These resolutions were approved by the Reference Committee on Legislation and Political Action and were adopted by the House.

Dr. Winn read the report of the Committee on Scientific Exhibit, emphasizing the growth

and value of this feature and recommending that hereafter certificates of merit be awarded to the three exhibits most entitled to recognition.

The report of the Reference Committee on Reports of Officers was then read. As this report is really a summary of the entire year's work of the Association and its officers, it is given herewith in full:

REFERENCE COMMITTEE ON REPORTS OF OFFICERS.

Dr. Philip Mills Jones, California, read the report of the Reference Committee on Reports of Officers.

I. PRESIDENT'S ADDRESS.

(a) *Medical Education.*

We endorse opposition to the course of certain physicians in organizing or conducting incompetent medical schools, and we believe that the moral weight of this Association, together with the publicity which will eventually follow the work of the Council on Medical Education, will secure the proper uplifting of medical education in the United States. The honest activity of the various boards of examiners co-operating with the Council will be of inestimable value in securing this result.

(b) *Council on Pharmacy and Chemistry.*

We most earnestly commend the work of the Council on Pharmacy and Chemistry and the President's views thereon, and we commend to the Board of Trustees the further and permanent continuance of this work. We most strongly recommend that the members of this Association confine their prescriptions to articles contained in the United States Pharmacopeia, the National Formulary or such as have been, approved by the Council on Pharmacy and Chemistry.

(c) *Fees for Life Insurance.*

We endorse the report of the Insurance Committee and believe that a minimum fee of five dollars for life insurance examinations is just and fair, and we deprecate the organized effort of certain companies to compel the acceptance of a lesser fee. While it would seem desirable for county societies to take cognizance of this matter, we further deprecate the exercise of any

harsh or coercive measures directed against individual members. We also agree with the view that present differences will eventually be amicably adjusted. We concur in the recommendation that the committee be discharged.

(d) *Reference Committees.*

We endorse the recommendation referring to committees, and recommended that the various reference committees be appointed two months in advance of the annual meeting, and that the reports be referred to these committees early enough for consideration.

II. REPORT OF GENERAL SECRETARY.

We sincerely commend, and heartily approve, the work of the General Secretary as set forth in his report, and we believe that the growth of the Association and the development of THE JOURNAL and its plant are largely if not entirely due to his indefatigable efforts.

III. REPORT OF THE BOARD OF TRUSTEES.

Any organization or corporation transacting business can only be successful so long as its affairs are conducted in a careful and up-to-date business-like manner, and it is with pleasure that we note the essentially thorough and business-like manner in which the Trustees have conducted the affairs of this Association. We believe that the statement of audit is sufficiently definite and comprehensive, and that to make public further and more intimate business details would be unwise and poor business policy. We consider the publication of the American Medical Directory, the compilation of data relative thereto, and of the graduation and licensure of physicians in the United States, undertakings of the greatest value to the Association and to the entire medical profession; and we consider the financial status of this portion of the Association work to be eminently satisfactory.

IV. REPORT ON ORGANIZATION.

We recommend that Dr. J. N. McCormack be requested by the Trustees to continue his most valuable work with the profession, and the laity in this country.

(a) In the matter of the proposed post-graduate work, we recommend that the Trustees appropriate six hundred dollars for this purpose.

(b) We consider that active work in county societies is of the greatest value to the medical profession of this country, and we earnestly recommend that every effort be made to stimulate interest and activity in county society work.

In the matter of the proposed branch associations, we recommend that this report on branch associations be referred to the state associations by the General Secretary with an urgent request for an expression of their views, to be presented to this Association at the next annual meeting.

We offer the following:

Whereas, The Council on Pharmacy and Chemistry, after examining many hundreds of preparations, has officially announced its approval of a large number of such preparations; and

Whereas, We believe that the editors of many medical journals in this country, both official organs of State Associations and privately owned journals, are desirous of co-operating in the work of freeing the medical profession from the nostrum control; therefore, be it

Resolved, That this Association most earnestly requests all medical journals to refuse to aid in promoting the sale of preparations which have not been approved by the Council by refusing advertising space to such preparations; and be it further

Resolved, That we most earnestly request the moral and financial support of our members for those medical journals, whether privately owned or controlled by medical organizations which disregard commercialism and stand firm for honesty and right dealing, thus sustaining the Council in its greatest work for the medical profession.

In conclusion, your committee believes that all of the officers of this Association have served it well and faithfully, and we, therefore, move the adoption of the following:

Resolved, That the thanks of the Association be extended to the President, the General Secretary, the Board of Trustees and other officers for their valuable and efficient services.

W. T. SARLES,
 PHILIP MILLS JONES,
 W. W. RICHMOND,
 DONALD CAMPBELL,
 A. JACOBI, *Chairman*.

Dr. Lund presented a resolution from the Section on Surgery and Anatomy, asking for the appointment of a committee of five to be known as the Anesthesia Commission, to devote five years to the accumulation and analysis of data regarding anesthetics and to render an annual report to the Section on Surgery and Anatomy. This resolution was approved by the Reference Committee on Sections and Section work and was referred to the Trustees for appropriation.

The Section on Pharmacology and Therapeutics recommended that a committee of six be appointed to collect suggestions on desirable changes in the Pharmacopeia and that a certain sum be appropriated to pay the expenses of the committee. This was also referred to the Board of Trustees.

The election of officers resulted as follows:

President—Dr. Herbert L. Burrell, Boston.

First Vice President—Dr. Edwin Walker, Evansville, Ind.

Second Vice President—Dr. Hiram R. Burton, Lewes, Del.

Third Vice President—Dr. George W. Crile, Cleveland, O.

Fourth Vice President—Dr. W. Blair Stewart, Atlantic City, N. J.

General Secretary—Dr. George H. Simmons, Chicago.

Treasurer—Dr. Frank Billings, Chicago.

Trustees—Dr. T. J. Happel, Trenton, Tenn., re-elected (1907-1910); Dr. W. W. Grant, Denver, Colo., re-elected (1907-1910); Dr. Philip Marvel, Atlantic City, N. J., re-elected (1907-1910).

The other members of the Board are: Dr. E. E. Montgomery, Philadelphia, Pa., 1908;

Dr. A. L. Wright, Carroll, La., 1908; Dr. H. L. E. Johnson, Washington, D. C., 1908; Dr. H. L. Harris, Chicago, Ill., 1909; Dr. Wm. H. Welch, Baltimore, Md., 1909; Dr. Miles F. Porter, Ft. Wayne, Ind., 1909.

The following nominations for committees were then made by the President and confirmed by the House of Delegates:

Committee on Medical Legislation: In place of Dr. W. L. Bodman, Dr. C. S. Bacon, Illinois.

The other members of the committee are: Dr. C. A. L. Reed, Cincinnati, O., Chairman, 1909; Dr. Wm. H. Welch, Baltimore, Md., 1908.

Council on Medical Education: In place of Dr. Charles F. Frasier, Dr. James W. Holland, Pennsylvania.

The other members of the Council are: Dr. Arthur Dean Bevan, Chicago, Ill., Chairman, 1909; Dr. W. T. Councilman, Boston, Mass., 1910; Dr. J. A. Witherspoon, Nashville, Tenn., 1911; Dr. Victor G. Vaughan, Ann Arbor, Mich., 1908.

Committee on Transportation and Place of Session: Dr. M. L. Harris, Chicago; Dr. E. Eliot Harris, New York; Dr. W. A. Jayne, Denver; Dr. W. T. Salres, Sparta, Wis.; Dr. John C. Munro, Boston, is chairman of this committee.

Committee on Organization: Dr. J. N. McCormack, Bowling Green, Ky., Dr. George H. Simmons, Chicago, Dr. Philip Mills Jones, San Francisco.

Board of Public Instruction on Medical Subjects: Dr. J. G. Clark, Philadelphia, 1907-1911; Dr. F. F. Simpson, Pittsburg, 1907-1911; Dr. Frank Billings, Chicago, 1907-1910; Dr. George H. Monks, Boston, 1907-1910; Dr. L. S. McMurtry, Louisville, Ky., 1907-1909; Dr. Howard Kelly, Baltimore, 1907-1909; Dr. L. Emmett Holt, New York, 1907-1908.

Judicial Council: Dr. C. E. Cantrell, Texas; Dr. R. C. Cabot, Massachusetts; Dr. G. W. Guthrie, Pennsylvania; Dr. Thomas McDavitt, Minnesota; Dr. Charles J. Kipp, New Jersey.

News Items

Dr. Adam Guthrie, of Prescott ably represented the Arkansas Medical Society in the House of Delegates of the American Medical Association which recently met at Atlantic City. Dr. Guthrie was prominent in the discussion to abolish the canteen and spoke against its endorsement by the Association.

Dr. A. R. Howell, of Argenta, after a sojourn of three weeks at Claremore, I. T., has returned improved in health.

The friends of Dr. Vinsonhaler will rejoice to learn of the convalescence of his only boy baby who has been dangerously ill with enterocolitis.

Dr. W. P. Illing has resigned as superintendent of the Hospital and Secretary of the faculty of the College of Physicians and Surgeons, Little Rock, and after a trip abroad, will engage in private practice in this city.

Dr. Frank A. Jones, of Memphis, was a welcome guest of the Society at the Little Rock meeting, and contributed a valuable paper to the Section on Medicine.

Prominent amongst the Memphis contingent who honored the Little Rock meeting with their presence, was Dr. Jas. L. Jelks, who read a paper on "Amebiasis."

Dr. F. C. Richardson, until recently assistant physician at the Penitentiary, at Little Rock, has just completed a post-graduate course at the New York Polyclinic, and will resume the practice of medicine at Conway.

Dr. G. L. Henderson, of Greenbrier, who has been seriously ill for some time, is reported to be convalescent.

Dr. R. C. Dorr, of Batesville, has been in Chicago, Rochester, and other medical centers doing post-graduate work.

Change of Addresses

Dr. H. P. Routh, from Hackett, to Hartford, Ark.

Robt. O. Wozencraft, from Holly Springs, to Pine Grove, Ark.

S. A. Smith, from Jacinto to Sparkman, Ark.

Questions Asked on Examination at the Quarterly Meeting of the State Medical Board of the Arkansas Medical Society Held at Little Rock, July 9, 1907.

MATERIA MEDICA AND THERAPEUTICS.

By F. T. Murphy, M. D., Brinkley.

1. Classify the following medicines: salicin, codeine, resorcin, santonin, amyl nitrite?

2. Name three (3) of the principal emmenagogues, and give dose of each?

3. Define a diaphoretic? Name three (3) classes and explain the mode of action of each class?

4. Name three (3) common preparations of arsenic, and give dose of each?

5. Name the official chlorides and iodides of mercury?

6. Name the three (3) most used preparations of opium and state how much of each contains one grain of opium?

7. From what is pilocarpine obtained? Give dose and physiological effects?

8. Which do you prefer as a general anesthetic—chloroform or ether? Give reason for choice?

9. Name three (3) remedies used in typhoid fever, and give reason for their administration?

10. What disease so closely resembles strichnia poisoning? Give differential diagnosis?

CHEMISTRY.

By J. W. Meek, M. D., Camden.

1. How are the chlorides in the urine roughly detected?

2. When calomel is added to lime water, what reaction takes place—that is, what compounds are formed by the reaction?

3. When lime water is left in an open bottle, exposed to contact with the air, what causes a precipitate to occur? Also give nature of the precipitate?

4. What is prepared chalk, or creta preparata?

5. From what original elements are all the lime preparations used in medical practice obtained?

6. What acid is normally found in the stomach during digestion?

7. What is meant by the term "undifferentiated protoplasm"?

8. What is the chemical composition of epsom salts—that is, the base and acid of which it is composed?

9. Give chemical composition of Glauber's salt—that is, the base and acid of which same is composed?

10. Of what is tartar emetic composed?

ANATOMY.

By Vernon MacCammon, M. D., Arkansas City.

1. When in the development of the foetus is the mammary gland formed?

2. Name the bones of the cranium?

3. Describe the occipital bone?

4. Describe the clavicle and give attachment of muscles?

5. Describe the muscles of the infra-hyoid region?

6. Describe the soleus muscle?

7. Name the branches of the lingual artery?

8. Describe the eyeball?

9. Describe the stomach?

10. Describe the general structure of the kidney?

OBSTETRICS.

By M. Fink, M. D., Helena.

1. Give diagnosis, prognosis, and treatment of puerperal eclampsia?

2. Describe asphyxia neonatorum? Give varieties and treatment?

3. Name some of the conditions which would warrant the induction of premature labor?

4. How during pregnancy may the death of the foetus be recognized?

5. Give prognosis, diagnosis, and treatment of placenta previa?

6. Give conditions requiring podalic version.

7. In what stage of labor is it proper to give ergot?

8. Give diagnosis of the foetal presentation, and position by both external and internal methods?

9. Give the symptoms of puerperal septicaemia, its cause and treatment?

10. Describe Crede's method of delivering the placenta?

SURGERY.

By G. S. Brown, M. D., Conway.

1. Give the causes and symptoms of acute ileus?

2. Give the causes of gangrene?

3. Describe the dangers incident to the introduction of the catheter?

4. What is granulation?

5. Describe operation for strangulated femoral hernia?

6. Describe repair of fractures?

7. Describe Bier's method of treatment in chronic and acute surgical infectious joint diseases?

8. Describe amputation of the ankle joint, choosing method preferred?

9. Give diagnosis of dislocated shoulder joint, and Kocher's method of reduction?

10. What is shock? Give symptoms and treatment?

PHYSIOLOGY.

By G. V. Poyner, M. D., Green Forest.

1. Name some of the local peculiarities of the circulation in the brain?

2. Describe the cerebro-spinal fluid and give its function?

3. Trace the right pneumogastric nerve from its origin, giving its most important branches and functions?

4. What do you understand by the terms (a) tidal, (b) complemental, (c) reserve, and (d) residual air?

5. What are the respiratory changes of the blood?

PRACTICE OF MEDICINE.

By M. L. Norwood, M. D., Lockesburg.

1. Give etiology, symptoms and treatment of inanition fever?

2. Give etiology, symptoms and treatment of cholera infantum?

3. Give etiology, symptoms and treatment of chronic gastric catarrh?

4. Differentiate remittent, malarial, and typhoid fever by temperature chart?

5. Describe a typical case of pernicious malaria (so-called congestive chill), and give treatment in detail?

6. Differentiate acute alcoholism and cerebral apoplexy?

7. Give period of incubation and one common complication or sequela that may occur in each of the following diseases: rubeola? scarlatina? pertussis? epidemic parotitis? varicella? variola? diphtheria?

8. Give diagnosis of lobar pneumonia by physical signs?

9. Where does the effusion of serum first appear in nephritis? In cirrhosis of liver? In cardiac disease?

10. What do you understand by reflex or transferred pain? Give several examples?

THE OWNER OF THE PRESCRIPTION.

That perennial question, the ownership of the prescription, is being agitated in some of the German newspapers, owing to the publication of a legal opinion in which it was declared that the prescription was the property

of the physician, the patient having only temporary rights in it and the apothecary none at all. If, however, the patient at the time of receiving the prescription from the physician stipulates for the right to own it, then it becomes his property; but this property right does not carry with it the privilege of selling the prescription to another or of incorporating it in a book of formulas. We think that the practice, so universally observed in English speaking countries, of the apothecary retaining the original prescription and furnishing a copy to the patient, if asked for, is the best one. In the case of a controversy arising as to the correctness of the apothecary's work in putting up the prescription his ability to produce the original and prove his case by it might be an important factor. A case to decide the ownership of the prescription has never been taken to the State courts of last resort in this country, and in the absence of decisions of this kind pharmacists would do well to insist on retaining the original prescription and furnish a copy only when demanded. Explicit orders of the physician should, however, be obeyed. If the apothecary is instructed to return the prescription to the patient, then all he has to do is to make an exact copy of it and file it for reference.—American Druggist, April 8, 1907.

Book Reviews

MODERN MEDICINE. Its Theory and Practice. In Original Contribution by American and Foreign Authors. Edited by William Osler, M. D., Regius Professor in Oxford University, England; Honorary Professor of Medicine in the Johns Hopkins University, Baltimore; Formerly Professor of Clinical Medicine in the University of Pa., and of the Institutes of Medicine in McGill University, Montreal, Canada. Etc.

This volume which deals with infectious diseases, contains about 825 pages. It is the second volume of a system of the Practice of Medicine, being edited by this eminent teacher. It is well printed, and bound and splendidly arranged. The subjects treated in this book, are handled by masters of undoubted ability. Dr. Osler has selected wisely in choosing his co-workers. The Introductory chapter, on the "General nature and specificness of infectious diseases," is thoroughly, and beautifully written. Typhoid Fever is exhaustively presented, nothing concerning this dreadful disease being omitted. Following these are Small Pox, Chicken Pox, Scarlet Fever, and Measles, etc. These diseases while not occupying so much space as the more virulent infections, are strikingly treated of, the authors going into details concerning everything. Diphtheria and Influenza, while not occupying sections following each other as reviewed, are so interestingly written up that they should be considered together. The authors present these subjects in a manner which strikes the reader with forceful logic, and in a convincing way. Erysipelas and Pneumonia are also written with unusual care and depth. The authors of these papers handle their subjects with a degree of forceful presentation, that command attention. So all along through the volume. All authors, without exception, have written their respective papers in a faultless manner. The work is one of the best contributions to the profession that has ever been given us.

From the press of the well known firm of Messrs. Lea Brothers & Co., Philadelphia, Pa.

C. C. S.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopædics, Pathology, Dermatology, Otology, Rhinology, Laryngology, Hygiene, and other topics of interest to students and practitioners by leading members of the profession of the world. Edited by W. T. Longcope, M. D., Philadelphia, with the co-laboration of Osler, Musser, Billings, McPhedran, Mayo, etc.

This book is volume II of the well known series. The names attached to the subject matter therein contained, is sufficient guarantee of its merit. The book is well printed and bound, containing about 300 pages of text. Heretofore this work has met with a cordial reception, and in so far as its authors, and the general work is concerned, will still be well received. But we are of the opinion that it would be better if the publishers would discontinue the nostrum advertisements in the back part of the book. Aside from this, the work is fine and is to be commended.

Published by the J. B. Lippincott Co., Philadelphia, Pa.

C. C. S.

MODERN SURGERY: GENERAL AND OPERATIVE. By J. CHALMERS DACOSTA, M. D., Professor of the Principles of Surgery and of Clinical Surgery in the Jefferson Medical College, Philadelphia. *Fifth Revised Edition, Enlarged and Reset.* Octavo volume of 1283 pages, with 872 illustrations, some in colors. Philadelphia and London: W. B. Saunders Company., 1907. Cloth, \$5.50 net; Half Morocco, \$7.00 net.

As DaCosta's Manual of Surgery was one of the most popular as well as meritorious of the new books that appeared in 1894, so should the present magnificent volume, in the fifth edition, enlarged, amplified and in many places entirely rewritten to conform to surgical progress, become the leading text in this country. The original aim of the author has not been lost in the progressive metamorphosis which has characterized each edition. and "the fundamental principles, the chief operations, and the accepted methods of modern surgery," are pre-

sented "in clear terms and in concise form." The new matter contained in the book includes the operations of Hugier and Murphy for ankylosis, the Quenu-Mayo operation for rectal cancer, the Mayo brothers no-loop method for gastro-jejunostomy, Matas's operation for aneurysm, etc. It were fulsome to make further commendation of a work that must continue to take its place amongst the best single volumes on surgery, and the student and practitioner will welcome this latest presentation of modern surgery.

ATLAS AND EPITOME OF DISEASES OF CHILDREN. By DR. R. HECKER and DR. J. TRUMPP, of Munich. Edited, with additions, by ISAAC A. ABT, M. D., Assistant Professor of the Diseases of Children in Rush Medical College, in affiliation with the University of Chicago. With 48 colored plates, 147 black and white illustrations, and 453 pages of text. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$5.00 net.

Ever since Rotch and Jacobi *impressed* upon the profession the major specialty, Pediatrics, the announcement of the appearance of a new work on this branch is always received as welcome news to those who endeavor to keep in close touch with the progress made in the study of diseases of children. This Atlas and Epitome of Diseases of Children, by Hecker and Strumpp, of the University of Munich, Germany, and edited by Isaac A. Abt., M. D., of Chicago, is one of the latest offerings presented by the house of Saunders. The authors make no claims which are not justified in the text, for it is not intended that the Manual should supplant the systematic text-books, but rather is it designed to assist the student in gaining a better knowledge of them. The treatment of nearly every subject is made wonderfully clear by a wealth of pictorial illustrations that greatly enhance the value of the book. These illustrations are amongst the best that we have seen and are models of art. It has been necessary to make many changes to conform to the American idea and practice, and this has been faithfully done by Dr. Abt.

THE PRACTICE OF OBSTETRICS. By American Authors. Edited by CHARLES JEWETT, M.

D., Professor of Obstetrics in the Long Island College Hospital, Brooklyn, N. Y. In one handsome octavo volume of 786 pages, with 455 engravings in black and colors and 36 full-page colored plates. Cloth, \$5.00 net; leather, \$6.00 net; half morocco, \$6.50 net. Lea Brothers & Co., New York and Philadelphia.

A very good rule by which the value of a book may be judged, is to find perfect agreement of preface and text. The editor, in the preface to the third edition, says, "The aim in this work from its inception has been to present clearly and concisely the principles and practice of obstetrics in accordance with a simple and rational plan suited alike to student and practitioner." Examination of the contents shows how well this claim has been substantiated. Obstetrics is one of the most important single branches of medicine, and it is not unexpected to look for the constant appearance of new texts on the subject. Of those that have recently appeared, this one, contributed to by the most eminent American authors, is justly entitled to stand at the head of the list solely upon its merits. Ponderosity, an objection to many books, is avoided in this one, although it might naturally be expected in a book of composite authorship; but instead, a completeness and thoroughness are maintained within the compass of seven hundred pages. A thorough revision, the introduction of many new beautiful illustrations, and the sensible size of the book, make it suitable for the student as well as practitioner.

A TEXT-BOOK OF PRACTICAL THERAPEUTICS. With Special Reference to the Application of Remedial Measures to Disease and Their Employment Upon a Rational Basis. By Hobart Amory Hare, M.D., B.S., Professor of Therapeutics and Materia Medica in the Jefferson Medical College, Philadelphia, etc. Twelfth Edition. Enlarged, Thoroughly Revised and Largely Rewritten. Illustrated with 114 Engravings and 4 Colored Plates. Philadelphia and New York. Lea Brothers & Co. 1907. Cloth, \$4.00 net.

The fact of this book passing through twelve editions is sufficient to indicate its superior

character and the permanent hold it has upon the student and practitioner. The general order of the book has not been changed, and those who have become familiar with the arrangement of subjects, will experience the same ease in finding the discussion of a drug and its therapeutic indication as formerly. The author states that, "More complete information is given as to *Materia Medica* than ever before, and a considerable number of the recent advances in therapeutic procedure have been introduced. Thus, the value of citrate of sodium in the feeding of bottle-fed babies, the use of calcium lactate, hypodermically and by the mouth, in hemophilia, urticaria, and oozing hemorrhage is discussed. More information is given as to the best methods of treating syphilis by the hypodermic injection, and the importance of using saline solutions of exact strength for intravenous injection is emphasized." Under the head of Worms, no mention is made of *Uncinaria Americanna* (Stiles), unless it was intended to include this variety with *Ankylostoma duodenale*; if so, the dose of thymol recommended is altogether too small, 2 to 4 grains being of doubtful efficacy. Hare's *Practical Therapeutics* by virtue of its genuine merit and adaptability to every-day requirements, must remain one of the leading text-books, as it is the most popular.

THE AMERICAN POCKET MEDICAL DICTIONARY. Edited by W. A. NEWMAN DORLAND, M. D., editor "The American Illustrated Medical Dictionary." *Fifth Revised Edition*. 32 mo of 574 pages. Philadelphia and London: W. B. Saunders Company, 1907. Flexible Morocco, gold edges, \$1.00 net; thumb indexed, \$1.25 net.

THE CARE OF THE BABY. By J. P. CROZER GRIFFITH, M. D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania. *Fourth Revised Edition*. 12mo of 455 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$1.50 net.

This little volume, thoroughly revised and now in the fourth edition, is intended "to furnish a reliable guide for mothers anxious

to inform themselves with regard to the best way of caring for their children in sickness and health." The hygiene of pregnancy, the characteristics of a healthy baby, the growth and development of its mind and body, bathing, dressing and feeding children of different ages are some of the more important subjects that are discussed. We doubt the propriety of the chapters on the symptomatology and treatment of the diseases that afflict the baby being included in a work intended solely for the mother. The book is of greater value to the doctor than the mother.

THE PRINCIPLES AND PRACTICE OF DERMATOLOGY. Designed for Students and Practitioners. By William Allen Pusey, A. M., M. D., Professor of Dermatology in the University of Illinois; Dermatologist to St. Luke's and Cook County Hospitals, Chicago; Member of the American Dermatological Association. With one Colored Plate and Three Hundred and Sixty-Seven Text Illustrations. Cloth, \$6.00, net. D. Appleton & Co., New York and London.

It is hardly to be expected that a work on Dermatology should escape rather severe criticism from those who specialize in this department of medicine, for there is yet no agreement on classification, although it seems that by this time there should be a universal nomenclature. Dr. Pusey, in this, the latest and most important publication that has appeared recently upon this subject, has adopted the classification of Hebra with slight modifications. Recognizing that a thorough knowledge of primary principles is necessary in order to obtain a satisfactory grasp of special diseases, he has devoted considerable space in the forepart of the book to The Principles of Dermatology, Anatomy and Physiology of the Skin, General Etiology, Pathology, Symptomatology and Treatment. The text is clear, comprehensive and pleasing, and those who have had the pleasure of listening to Dr. Pusey's lectures and attending his clinics, will appreciate the individuality which dominates the book and which gives it a character not always to found in works of this subject. At least the practitioner who must often rely upon the text and illustrations for his diagnosis, will be quick to grasp the

practical feature of the book, and find it ready to give quick service in time of need. The illustrations are numerous and truthfully descriptive.

THE PRACTITIONER'S LIBRARY OF GYNECOLOGY, OBSTETRICS AND PEDIATRICS, in Original Contributions, by Eminent American and English Authors. THE PRACTICE OF GYNECOLOGY—Edited by J. WESLEY BOVEE, A.M., M.D., Professor of Clinical Gynecology in the George Washington University, Washington, D. C. Large octavo, 836 pages, with 382 engravings and 60 full-page plates in colors and monochrome. THE PRACTICE OF OBSTETRICS—Edited by REUBEN PETERSON, A.B., M.D., Professor of Obstetrics and Diseases of Women in the University of Michigan, Department of Medicine and Surgery, Ann Arbor, Mich. Large octavo, 1087 pages, with 523 engravings and 30 full-page plates in colors and monochrome. THE PRACTICE OF PEDIATRICS—Edited by WALTER LESTER CARR, M.D. Consulting Physician to the French Hospital; Visiting Physician Infants' and Childrens' Hospital, New York. Large octavo, 1014 pages, with 199 engravings and 32 full-page plates in colors and monochrome. Price per single volume, Cloth, \$6.00. Leather, \$7.00; Half Morocco, \$8.00. Price for any two volumes, Cloth, \$11.00; Leather, \$13.00; Half Morocco, \$15.00. Price for the three volumes, Cloth, \$15.00; Leather, \$18.00; Half Morocco, \$21.00. Lea Brothers & Co., Philadelphia and New York.

The appearance of The Practice of Gynecology, edited by J. Wesley Bovee, A.M., M.D., Professor of Clinical Gynecology in the George Washington University, Washington, D. C., completes The Practitioner's Library of Gynecology, Obstetrics and Pediatrics, a series contributed to by eminent English and American authors, and edited by three distinguished American teachers and clinicians, Bovee, Peterson and Carr. The early announcement of the publishers postulated that the object of the series would be "to cover the whole domain composed of three cognate major specialties." This last volume, completing the series, justifies their claim beyond the peradventure of a doubt. The

contributors to this volume are Bovee, Goffe, Miller, Noble, Schenck, Watkins and Werder, and with this array of authors, one need not search beyond its covers to find theoretical gynecology beautifully practicalized, and, also let it be added, Americanized. Especially strong and comprehensive are the chapters on Lacerations of the Perineum; Diseases and Injuries of the Vagina and Vulva, and Diseases of the Ovaries and Fallopian Tubes. The illustrations are striking, many original, and so abundant, that if it were possible to teach a subject with them alone, it seems that they are sufficient in number and character. This Gynecological, Obstetrical and Pediatrical Trinity should occupy a first place on the shelves of every practitioner's library.

SURGICAL DIAGNOSIS. By DANIEL N. EISENDRATH, M.D., Adjunct Professor of Surgery in the Medical Department of the University of Illinois (College of Physicians and Surgeons). Octavo of 775 pages, with 482 original illustrations, 15 in colors. Philadelphia and London. W. B. Saunders Company, 1907. Cloth, \$6.50 net; Half Morocco, \$8.00 net.

Ample evidence of the truthfulness of the saying, "of the making of good books there seems to be no end," is afforded in "Surgical Diagnosis" by Dr. Eisendrath. A teacher of long experience and an operator of great skill, the author has correlated, systemized and we might truthfully add, clarified, the essentials of surgical symptomatology and presented them in a manner that cannot fail to impress the reader as original and convincing. Believing that the eye should be called into service in the making of a diagnosis, the book abounds in original illustrations, and what cannot be said of all books, the illustrations "illustrate." If one department of the book could be said to impress one more than another, it seems that consideration of Injuries of Bones, Joints, Fractures and Dislocations is entitled to the credit. Space is devoted to "Opsonins and the Opsonic Index," "Cytodiagnosis," "Cystoscopy," and "Cryoscopy." sufficient proof that the work is brought up to date. It should be on the desk, not in the book-case, of the busy operator, for it is one of the best of its kind.

MATERIA MEDICA, THERAPEUTICS, PHARMACOLOGY AND PHARMACOGNOSY. Including Medical Pharmacy, Prescription Writing and Medical Latin. A manual for Students and Practitioners. By William Schleif, Ph. G., M. D., Demonstrator of Medical Pharmacy in the Medical Department University of Pennsylvania. Edited by Bern B. Gallaudet, M. D. Third edition, revised and enlarged. Lea Bros. & Co., Philadelphia and New York.

AMERICAN POCKET MEDICAL DICTIONARY. Edited by W. A. Newman Dorland, A. M., M. D. Fifth edition, revised and enlarged. W. B. Saunders Co., Philadelphia and New York.

BOOKS, PAMPHLETS AND REPRINTS RECEIVED.

SURGICAL ANESTHESIA WITH SPECIAL REFERENCE TO POSTANESTHETIC NAUSEA AND VOMIT-

ING.—W. Turnor Wooton, M. D., Hot Springs, Ark.. Lancet-Clinic, June 15, 1907.
April 27, 1907.

SPECIFIC TREATMENT OF TUBERCULOSIS PULMONALIS. E. G. Epler, M. D., Fort Smith, Ark. Lancet-Clinic, June 15, 1907.

HYGIENE LABORATORY BULLETIN, No. 34.

- I. Agamafilaria georgiana.
- II. The Zoological Characters of the Roundworm Genus *Filaria* Mueller, 1787.
- III. Three New American Cases of Infection of Man with Horse-hair worms (species *Paragordius varius*), with summary of all cases reported to date.—Ch. Wardell Stiles, Government Printing Office.

Constitution and By-Laws

Arkansas Medical Society

ARTICLE I.—NAME OF THE SOCIETY.

The name and title of this organization shall be the Arkansas State Medical Society.

ARTICLE II.—PURPOSES OF THE SOCIETY.

The purposes of this Society shall be to federate and bring into one compact organization the entire medical profession of the State of Arkansas and to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life.

ARTICLE III.—COMPONENT SOCIETIES.

Component Societies shall consist of those county medical societies which hold charters from this Society.

ARTICLE IV.—COMPOSITION OF THE SOCIETY.

SECTION 1. This Society shall consist of Members, Delegates and Guests.

SEC. 2. MEMBERS. The Members of this Society shall be the members of the component county medical societies.

SEC. 3. DELEGATES. Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Society.

SEC 4. GUESTS. Any distinguished physician not a resident of this State, who is a member of his own State Society, may become a guest during any Annual Session on invitation of the officers of this Society, and shall be accorded the privilege of participating in all of the scientific work for that Session.

ARTICLE V.—HOUSE OF DELEGATES.

The House of Delegates shall be the legislative body of the Society, and shall consist of: (1) Delegates elected by the component county societies; (2) the Councilors; and (3) *ex-officio*, the President and Secretary of this Society.

ARTICLE VI.—COUNCIL.

The Council shall consist of the Councilors, and the President and Secretary, *ex-officio*. Besides its duties mentioned in the By-Laws, it shall constitute the Finance Committee of the House of Delegates. Six councilors shall constitute a quorum.

ARTICLE VII.—SECTIONS AND DISTRICT SOCIETIES.

The House of Delegates may provide for a division of the scientific work of the Society into appropriate Sections, and for the organization of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE VIII.—SESSIONS AND MEETINGS.

SECTION 1. The Society shall hold an Annual Session, during which there shall be held daily General Meetings, which shall be open to all registered members and guests.

SEC. 2. The time and place for holding each Annual Session shall be fixed by the House of Delegates.

ARTICLE IX.—OFFICERS.

SECTION 1. The officers of this Society shall be a President, three Vice-Presidents, a Secretary, a Treasurer and ten Councilors.

SEC. 2. The officers, except the Councilors, shall be elected annually. The terms of the Councilors shall be for two years, those first elected serving one and two years, as may be arranged, so that after the first year five Councilors shall be elected annually to serve two years. All these officers shall serve until their successors are elected and installed.

ARTICLE X.—RECIPROCITY OF MEMBERSHIP WITH OTHER STATE SOCIETIES.

In order to broaden professional fellowship this Society is ready to arrange with other State Medical Societies for an interchange of

certificates of membership, so that members moving from one state to another may avoid the formality of re-election.

ARTICLE XI.—FUNDS AND EXPENSES.

Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall be fixed by the House of Delegates, but shall not exceed the sum of \$2.00 per capita per annum, except on a four-fifths vote of the Delegates present. Funds may also be raised by voluntary contributions, from the Society's publications and in any other manner approved by the House of Delegates. Funds may be appropriated by the House of Delegates to defray the expenses of the Society, for publications, and for such other purposes as will promote the welfare of the profession. All resolutions appropriating funds must be referred to the Finance Committee before action is taken thereon.

ARTICLE XII.—REFERENDUM.

SECTION 1. A General Meeting of the Society may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates, and when so ordered the House of Delegates shall submit such question to the members of the Society, who may vote by mail or in person, and, if the members voting shall comprise a majority of all the members of the Society, a majority of such vote shall determine the question and be binding on the House of Delegates.

SEC. 2. The House of Delegates may, by a two-thirds vote of its own members, submit any question before it to a general referendum, as provided in the preceding section, and the result shall be binding on the House of Delegates.

ARTICLE XIII.—THE SEAL.

The Society shall have a common Seal, with power to break, change or renew the same at pleasure.

ARTICLE XIV.—AMENDMENTS.

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the Delegates present at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been pub-

lished twice during the year in the bulletin or journal of this Society, or sent officially to each component society at least two months before the meeting at which final action is to be taken.

BY-LAWS.

CHAPTER I.—MEMBERSHIP.

SECTION 1. The name of a physician on the properly certified roster of members of a component society, which has paid its annual assessment, shall be *prima facie* evidence of membership in this Society.

SEC. 2. Any person who is under sentence of suspension or expulsion from a component society, or whose name has been dropped from its roll of members, shall not be entitled to any of the rights or benefits of this Society, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

SEC. 3. Each member in attendance at the Annual Session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of his society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an Annual Session until he has complied with the provisions of this section.

CHAPTER II.—ANNUAL AND SPECIAL SESSIONS OF THE SOCIETY.

SECTION 1. The Society shall hold an Annual Session at such time and place as has been fixed at the preceding Annual Session by the House of Delegates.

SEC. 2. Special meetings of either the Society or of the House of Delegates shall be called by the President on petition of twenty delegates or fifty members.

CHAPTER III.—GENERAL MEETINGS.

SECTION 1. All registered members may attend and participate in the proceedings and discussions of the General Meetings and of the Sections. The General Meetings shall be presided over by the President or by one of the Vice-Presidents, and before them shall be heard the address of the President and the orations,

and such scientific papers and discussions as may be arranged for in the program.

SEC. 2. The General Meeting may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and public.

CHAPTER IV.—HOUSE OF DELEGATES.

SECTION 1. The House of Delegates shall meet on the day before that fixed as the first day of the Annual Session. It may adjourn from time to time as may be necessary to complete its business, provided, that its hours shall conflict as little as possible with the General Meetings. The order of business shall be arranged as a separate section of the program.

SEC. 2. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every 25 members, and one for each major fraction thereof, but each component society which has made its annual report and paid its assessment as provided for in this Constitution and By-Laws shall be entitled to one delegate.

SEC. 3. A majority of the Delegates registered shall constitute a quorum.

SEC. 4. It shall, through its officers, Council and otherwise, give diligent attention to and foster the scientific work and spirit of the Society, and shall constantly study and strive to make each Annual Session a stepping-stone to future ones of higher interest.

SEC. 5. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein it is dependent on the profession, and shall use its influence to secure and enforce all proper medical and public-health legislation, and to diffuse popular information in relation thereto.

SEC. 6. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly

intercourse among physicians of the same locality, and shall continue these efforts until every physician in every county of the State who is reputable and eligible has been brought under medical society influence.

SEC. 7. It shall encourage post-graduate and research work, as well as home study, and shall endeavor to have the results utilized and intelligently discussed in the county societies.

SEC. 8. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

SEC. 9. It shall divide the State into Councilor Districts, specifying what counties each district shall include, and, when the best interest of the Society and profession will be promoted thereby, organize in each a district medical society, and all members of component county societies shall be members in such district societies.

SEC. 10. It shall have authority to appoint committees for special purposes from among members of the Society who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and may be present and participate in the debate on their reports.

SEC. 11. It shall approve all memorials and resolutions issued in the name of the Society before they shall become effective.

CHAPTER V.—ELECTION OF OFFICERS.

SECTION 1. The House of Delegates on the first day of the Annual Session shall select a Committee on Nominations, consisting of ten delegates, no two of whom shall be from the same Councilor District. It shall be the duty of this committee to consult with the members of the Society and to hold one or more meetings at which the best interests of the Society and of the profession of the State for the ensuing year shall be carefully considered. The committee shall report the result of its deliberations to the House of Delegates in the shape of a ticket containing the names of three members for the office of President and of one member for each of the other offices to be filled at that Annual Session. No two candidates for President shall be named from the same county.

SEC. 2. All elections shall be by ballot, except where there is only one candidate when election may be made by acclamation, and a majority of the votes cast shall be necessary to elect.

SEC. 3. The report of the Nominating Committee shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the General Session.

SEC. 4. The election of officers shall be the second order of business of the House of Delegates on the morning of the last day of the General Session.

SEC. 5. Any person known to have solicited votes for or sought any office within the gift of this Society shall be ineligible for any office for two years.

SEC. 6. Delegates shall not be eligible for election to any of the offices named in the Constitution, except that of Councilor.

CHAPTER VI.—DUTIES OF OFFICERS.

SECTION 1. The President shall preside at all meetings of the Society and of the House of Delegates; shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office, and, as far as practicable, shall visit, by appointment, the various sections of the State and assist the Councilors in building up the county societies, and in making their work more practical and useful.

SEC. 2. The Vice-Presidents shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the Council shall select one of the Vice-Presidents to succeed him.

SEC. 3. The Treasurer shall give bond in the sum of \$1000. He shall demand and receive all funds due the Society, together with bequests and donations. He shall pay money out of the Treasury only on a written order of the President, countersigned by the Secretary; he shall subject his accounts to such examination as the House of Delegates may order, and he shall

annually render an account of his doings and of the state of the funds in his hands.

SEC. 4. The Secretary shall attend the General Meetings of the Society and the meetings of the House of Delegates, and shall keep minutes of their respective proceedings in separate record books. He shall be *ex-officio* Secretary of the Council. He shall be custodian of all record books and papers belonging to the Society, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Society which come into his hands. He shall provide for the registration of the members and delegates at the Annual Session. He shall, with the co-operation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the State by counties, noting on each his status in relation to his county society, and, on request, shall transmit a copy of this list to the American Medical Association. He shall aid the Councilors in the organization and improvement of the county societies and in the extension of the power and usefulness of this Society. He shall conduct the official correspondence, notifying members of meetings, officers of their election and committees of their appointment and duties. He shall employ such assistants as may be ordered by the House of Delegates and shall make an annual report to the House of Delegates. He shall supply all component societies with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessment, collect the same and turn it over to the Treasurer, taking his receipt therefor. Acting with the Committee on Scientific Work, he shall prepare and issue all programs. The amount of his salary shall be fixed by the House of Delegates.

CHAPTER VII.—COUNCIL.

SECTION 1. The Council shall meet on the day preceding the Annual Session and daily during the Session and at such other times as necessity may require, subject to the call of the chairman or on a petition of three Councilors. It shall meet on the last day of the Annual Session of the Society to organize and outline

work for the ensuing year. It shall elect a Chairman and a Clerk, who, in the absence of the Secretary of the Society, shall keep a record of its proceedings. It shall, through its Chairman, make an annual written report to the House of Delegates.

SEC. 2. Each Councilor shall be organizer, peacemaker and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual written report of his work, and of the condition of the profession of each county in his district at the annual session of the House of Delegates. The necessary traveling expenses incurred by such Councilor in the line of the duties herein imposed may be allowed on a proper itemized statement, but this shall not be construed to include his expenses in attending the Annual Session of the Society.

SEC. 3. The Council shall be the Board of Censors of the Society. It shall consider all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Society. All questions of an ethical nature brought before the House of Delegates or the General Meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or component societies, on which an appeal is taken from the decision of an individual Councilor, and its decision in all such matters shall be final.

SEC. 4. In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies, to be suitably designated so as to distinguish them from district societies, and these societies, when organized and chartered, shall be entitled to all rights and privileges provided for component societies until such counties shall be organized separately.

SEC. 5. The Council shall provide for and superintend the publication and distribution of all proceedings, transactions and memoirs of

the Society, and shall have authority to appoint an editor and such assistants as it deems necessary. All money received by the Council and its agents, resulting from the discharge of the duties assigned to them, must be paid to the Treasurer of the Society. It shall annually audit the accounts of the Treasurer and Secretary and other agents of this Society and present a statement of the same in its annual report to the House of Delegates, which report shall also specify the character and cost of all the publications of the Society during the year, and the amount of all other property belonging to the Society under its control, with such suggestions as it may deem necessary. In the event of a vacancy in the office of the Secretary or of the Treasurer, the Council shall fill the vacancy until the next annual election.

CHAPTER VIII.—COMMITTEES.

SECTION 1. The standing committees shall be as follows:

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Arrangement.

Such committees shall be appointed by the President unless otherwise provided.

SEC. 2. The Committee on Scientific Work shall consist of three members, of which the Secretary shall be one, and shall determine the character and scope of the scientific proceedings of the Society for each session, subject to the instructions of the House of Delegates. Thirty days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers, and discussions shall be presented.

SEC. 3. The Committee on Public Policy and Legislation shall consist of three members and the President and Secretary. Under the direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of public health and of scientific medicine. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and shall strive to organize professional influence so as to promote the general good of the community

in local, state and national affairs and elections.

SEC. 4 The Committee of Arrangements shall be appointed by the component society of the county in which the Annual Session is to be held. It shall provide suitable accommodations for the meeting-places of the Society and of the House of Delegates, and of their respective committees, and shall have general charge of all the arrangements. Its chairman shall report an outline of the arrangements to the Secretary for publication in the program, and shall make additional announcements during the session as occasion may require.

CHAIRMAN IX.—COUNTY SOCIETIES.

SECTION 1. All county societies now in affiliation with this Society or those which may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Society.

SEC. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charters shall be issued thereto.

SEC. 3. Charters shall be issued only on approval of the Council and shall be signed by the President and Secretary of this Society. Upon the recommendation of the Council the House of Delegates may revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

SEC. 4. Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the Councilor for the District if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

SEC. 5. Each county society shall judge of the qualification of its own members, but, as such societies are the only portals to this Society and to the American Medical Association, every reputable and legally registered physi-

cian who is a graduate of a reputable medical college and who does not practice or claim to practice, nor lend his support to any exclusive system of medicine, shall be eligible to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every such physician in the county to become a member.

SEC. 6. Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, and its decision shall be final.

SEC. 7. In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a Board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

SEC. 8. When a member in good standing in a component society moves to another county in this State his name, on request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves.

SEC. 9. A physician living near a county line may hold his membership in that county most convenient for him to attend, on permission of the component society in whose jurisdiction he resides.

SEC. 10. Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

SEC. 11. At some meeting in advance of the Annual Session of this Society, each county society shall elect a delegate or delegates to represent it in the House of Delegates of this Society, in the proportion of one delegate to each twenty-five members, and one for each major fraction thereof, and the Secretary of the Society shall send a list of such delegates to the

Secretary of this Society at least ten days before the Annual Session.

SEC. 12. The Secretary of each component society shall keep a roster of its members, and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. In keeping such roster the Secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall endeavor to account for every physician who has lived in the county during the year.

SEC. 13. The Secretary of each component society shall forward its assessment, together with its roster of officers and members, list of delegates, and list of non-affiliated physicians of the county, to the Secretary of this Society each year thirty days before the Annual Session.

SEC. 14. Any county society which fails to pay its assessment, or make the report required, on or ten days before shall be held as suspended and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Society or of the House of Delegates until such requirements have been met.

CHAPTER X.—MISCELLANEOUS.

SECTION 1. No address or paper before the Society, except those of the President and orators, shall occupy more than twenty minutes

in its delivery; and no member shall speak longer than five minutes, nor more than once on any subject, except by unanimous consent.

SEC. 2. All papers read before the Society or any of the Sections shall become its property. Each paper shall be deposited with the Secretary when read.

SEC. 3. The deliberations of this Society shall be governed by parliamentary usage as contained in Robert's Rules of Order, when not in conflict with this Constitution and By-Laws.

SEC. 4. The Principles of Medical Ethics promulgated by the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

CHAPTER XI.—AMENDMENTS.

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the Delegates present at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published twice during the year in the bulletin or journal of this Society, or sent officially to each component society at least two months before the meeting at which final action is to be taken.

H. C. DUNAVANT,
J. S. CORN,
F. B. YOUNG,
C. H. TRÖTTER,
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Committee.

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Next Annual Session, Chicago, Ill., June, 1908.

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Original Articles

ANOTHER PLEA FOR THE EARLY DIAGNOSIS AND RATIONAL TREATMENT OF PULMONARY TUBERCULOSIS.*

By Drs. D. C. Walt and Arthur E. Sweatland.

As this article is a recapitulation of the subject written upon by Dr. Sweatland and read before this Society three years ago in Texarkana, with additional evidences of results that have been added to our stock of experience and information gleaned from the experience of others, frequent references to the former paper will be pardoned as we think it pretty thoroughly covered the ground as understood at the time, but there are a few conditions we wish to add that appear to be of special importance.

It was a great impetus to progress when the fact was made known in 1882 by the efforts of Koch that the tubercle bacillus was the factor that wrought the destruction of tissue in this disease, furthermore this factor was not dependent upon hereditary conditions to make its lodgement in the body, but more decidedly from inoculation by the various means of physical transmission. It has also been pretty thoroughly established that the cause from a hereditary point of view depends upon a lowered vitality of the protoplasm developing the organism as an easy prey, not only to the invasion of the tubercle bacilli, but any germ affecting the economy. Tuberculosis is a disease that has the world for its field of action and invades the body in every habitable portion of the globe, making no exception even of those that have developed Herculean strength.

Favorable conditions for its development are manifested by unsanitary surroundings, still it enters the Palatine home of the most favored from a point of comfort and efforts to obtain freedom from this dreaded disease.

Would it not be right to presume if it was not for the cell protection of the body, that more than fifteen per cent of the world's population would die from a disease that does not produce immunity by its effects upon the organism, and at the same time so constantly and universally distributed, and has received so little benefit from treatment and curtailed to a very limited degree by hygiene, etc.?

When we have an acute, sub-acute or chronic katabolic condition that is produced by any cause competent of developing pathological effect, that shows itself in the various symptoms as cold extremities, flabby muscles, glandular derangements and all the declarations this abnormal process is capable of manifesting, we have little reason to suppose that the cells would be able to resist the invasion of the tubercle bacilli.

When we consider the amount of nutrition consumed, the amount of waste thrown out of the system each day, or even every few hours, and reason on the law governing waste and repair; the amount of oxygen, hydrogen, nitrogen and carbon and their relationship to one another and the constant changes in chemical formation, also the necessary calcium, sodium, potassium, magnesium, sulphur, iron manganese, etc., the number of compounds as albumen, carbohydrates, water and whatever it takes to compose the cells of the body to maintain normal relations, we can readily see that health is not a fixed quantity, especially so when the endless influences that play upon the harmony of cell life, are so numerous, of which it is only necessary to mention a few for suggestion, as the weather, commissions, omissions, and circumstances.

Then if we think of the fact that the waste forms the various ptomaine, uric acid (with carbon as their toxic element), a rapid destruction of tissue in galloping consumption is easily conceived. When the waste is excessive and the cells are intoxicated by carbon and decomposition in the blood stream, it renders the economy a prey to the invading tubercle bacilli.

*Read in the Section on Practice of Medicine, of the Arkansas Medical Society, at the Thirty-First Annual Session, Little Rock, May, 1907.

If it did not require an abnormal condition to lower the cell vitality, inhalation infection would be quite common and the tubercle bacilli would be more infectious than the greatest alarmist has tried to make it appear. The large number of over twenty millions of bacilli that are thrown out each day from a single subject, would have to be easy of destruction, very short lived, and the exposed body cell capable of self protection or the average individual could not escape the invasion.

. That all these conditions play an important part we have not the least doubt. And it is fair at the outset, says West, "That if phthisis were eminently contagious, the proof of it ought to be overwhelming considering the frequency of the disease and yet we see that great doubt exists on this among those most competent to judge, and that some who at one time believed in its contagiousness abandoned that opinion." Of these Louis, Partal and Laennec are notable instances. The question must be settled by facts and not theory.

We find from statistics the bulk of pulmonary tuberculosis occurs between the ages of 15 and 30 years. The child's developing capacity being more active when normal, and cared for and protected from exposed conditions and environments lowering its vitality, and the aged on account of physical inability are not exposed to the various conditions, the active and self-sustaining part of life requires, but, we find that when either of these contract and develop pulmonary tuberculosis they succumb very rapidly. It is a fact, that they are not able to contend with the malady until cavities are formed, as those are in the vigorous part of life.

We quote from the former paper: "Let us now consider briefly the first physical signs and symptoms of pulmonary tuberculosis, or, what has been termed, the pre-tubercular, the incubation period of the tubercle bacillus. It is an undeniable fact that pulmonary tuberculosis is a curable disease, if treated early in its course.

Under suspicious first indications I wish to mention the facial expression. The wide-open, anxious eye which may or may not have an injected conjunctiva. A dilated nostril, skin of forehead a peculiar shiny, glazed appearance, that has been described as the glazing on china. Inspection of mouth and throat I consider of great importance.

Tuberculosis of the lungs in its incipency, cannot always be diagnosed at one examination nor in one day, and while you are making a diagnosis the throat will show by frequently repeated examinations, if tuberculosis of the lungs exists, a peculiar redness which is characteristic of the disease.

Sometimes upon examination you will find the membranes of the pharynx pale and anaemic, while if you examine the same patient in an hour or two after, you may find it highly congested and of a color peculiarly its own. I may describe the color as a dusky, dirty red, which should be distinguished from an ordinary catarrhal inflammation. This cannot be attained without having the patient under very close observation for several days, when at some time during each twenty-four hours this symptom will arise and can be noted. The time of day whether there be fever or not, appears to make very little difference with reference to this symptom putting in an appearance. My attention was first called to this condition of the throat by Dr. W. C. Bailey, of Los Vegas, N. M., and since then I have found it of decided value. In beginning tuberculosis than any other physical sign. One may be able to detect uneven expansion of the two sides or rather an unequal raising of the shoulders. This can often be demonstrated where it is not evident to the examiner sitting in front or back of the patient, by placing a horizontal bar on each shoulder of the patient, allowing markings to be made on a wall or screen and thus noting the difference in rise and fall of the two sides during inspiration and expiration.

In some cases the infraclavicular space will be sunken but in the majority there will be no such deformity owing to compensation of the healthy lung having taken place. Posteriorly, the spinal or inner border of the scapula may be tilted outward and slightly downward, however, the effects in movement are more often to be observed early than any deformity of chest and are more to be relied upon in making an early diagnosis.

The effects in movement are due as noted by West, first, to deficient entry of air from obstruction to air tubes; second, diminished expansion of the lungs owing to consolidation, or to fibroid change in lung or pleura; third, to pain on breathing. It must be noted, however, that movements may not be affected although other physical signs are well marked. In many cases the subcutaneous veins are very distinct and may stand out prominently and West explains this as being due to pleuritic adhesions and thickening, pinching the branches of intercostal veins inside the thoracic walls, the blood which would normally pass through them being returned by anastomotic channels through the superficial veins. On palpation the vocal fremitus may be increased and if the consolidation or induration is near the surface the sense of resistance may be very distinct. This we should bear in mind would not be the case if a considerable amount of healthy tissue intervened between the tubercular foci and the periphery.

Under percussion we find very little to help us in early diagnosis. Even when auscultation gives suspicious signs the resonance on percussion may not be lessened from the normal; in fact, it may be, and often is hyperresonant. This is probably the result of an emphysema surrounding the tubercular foci or may be due to a relaxation of lung tissue because of a lack of proper nutrition. In some cases early in the disease dullness can be elicited over the center of the clavicle. This degree of dullness can be ascertained many times only by the most careful comparison with the percussion note elicited in front, dullness or flatness will exist behind between the scapula. This may become misleading. From auscultation we probably are able to discover the earliest physical signs; especially is this true in combined auscultation and percussion, but even with the latter there are limitations, and if the foci are deeply imbedded in the lung with healthy lung tissue intervening between the seat of infection and the periphery, even combined auscultation and percussion will be of no value. There may first be noted under auscultation that the expiratory murmur is audible above the normal and slightly prolonged; this I believe is the most important auscultatory sign of beginning phthisis. Inspiration will be a little harsher and the soft normal vesicular murmur is absent. As induration progresses the expiratory sound becomes as long as the inspiratory sound and both are harsh in character. This in most cases is after the disease has considerably advanced.

Occasionally crepitation is produced early and is very fine, and, as has been suggested, is probably due to spreading out of collapsed air vesicles or to a small amount of fluid in the air tubes. Fine crepitation cannot be distinguished from some pleuritic friction sounds, but that would make no difference in diagnosing phthisis, for heard at the apex they both mean tuberculosis. Sometimes subcrepitant crackling sharp rales may be heard early, but they are not pathognomonic of tubercle as was once thought, for they are to be found in broncho pneumonia and lobar pneumonia. The patient will have to inspire deeply in many instances to elicit these sounds, or it may be necessary to have them cough sharply to remove mucus that closes the air tubes, thus shutting out the very air that causes crepitation.

Vocal resonance gives very little that will help in diagnosing early tubercle in the lung. To be sure it gradually increases as the disease progresses, but before bronchophony and whispered bronchophony, or pectoriloquy, have developed, in the great majority of cases induration has become so extensive and probable breaking down has taken place. The X-ray recently has been of some

advantage in lung troubles, but so far it has been of no service in early diagnosis. Probably in the future it will lend us greater advantages.

It has been pointed out by Karl von Ruck that there is a sharp accentuation of the second pulmonary sound of the heart, which could be taken as an early sign of a diseased lung. This he contends is present in the latter part of the day if the patient is active and will be found absent in the morning after a night of rest. Of this I know nothing and cannot therefore speak intelligently, but as he explains, the obstruction in the lung would cause this very condition, and, as he states, he has observed this physical sign with great uniformity in the so-called pre-tubercular state, it looks reasonable. Temperature early may be and usually is of diagnostic value. A patient with a continuous sub-normal morning temperature, excluding all other causes of low temperature with an afternoon rise from 99 degrees to 100 degrees, is probably tubercular. This sign is often early and is important.

In summing up the points of value as regards physical signs in the early diagnosis of pulmonary tuberculosis, we find that they are altogether inadequate. We must look for some means more sure and certain than the ordinary physical ones. Probably combined auscultation and percussion will give us a diagnosis in a large number of cases, but where the foci or small induration are deeply imbedded and surrounded by healthy lung tissue we must resort to other means even than this. Of course, it is understood that finding the tubercle bacilli makes the diagnosis complete.

While writing this paper we had the good fortune of reading the article written by Herbert C. Clap, M. D., of Boston, visiting physician to the Massachusetts State Sanatorium for Incipient Consumptives, at Rutland, and Professor of Diseases of the Chest in Boston University. In the *Medical Record* of May 4th, 1907, he says: "Many laymen and not a few physicians, with a big swing of the pendulum from their former pessimism, have come to think that the cure for consumption is now a very easy matter; that there is not any need of drugs, nor even of physicians, but that all that is really necessary is to live in the open air and to eat plenty of good food. Would that it were so! We may be sure that shipwrecks would inevitably be the lot of large numbers of those who followed this practically good advice if they did nothing more. A "greenhorn" may sail a boat when everything is propitious, but wait until the storm comes! What does he think of details? We think they often make the difference between failure and success. This author also says: "We can cure the great majority of incipient cases and some of those more advanced, the difference con-

sisting in attention to details." He further says: "Nobody now considers climate so important a factor in the cure of tuberculosis as formerly; we now know that the disease can be cured in almost any climate. It does not make so much difference where one lives as how one lives."

A great many people would prefer to stay at home and at least in the State they live, and by far the majority had rather be relieved of the necessity of going to the barren deserts of America hundreds of miles from home and all the ties and congenialities that make life worth living, if they knew they could be cured without this sacrifice. And the poor from compulsion stay as the helpless flock in the snow-storm or as the preying of the devouring wolf, without practically the slightest effort made to offer them the cheering help of hope. And sometimes when too late to derive any benefit from the embracing atmosphere of the high, dry altitude is advised to sacrifice his little gains, for a still smaller amount of gold, and surrenders all else he holds dear, with the effort to reach the last straw and probably the only one extended to him, he goes to die from home and friends.

This must change, and as Dr. Sweatland said in his former paper, "It is changing." This has been demonstrated by the effort and results in differing degree by Russell, of New York, Charles S. Miner, of Asheville, N. C., Pratt and Hawes, of Boston, Loomis, and others.

The various methods arranged in shacks, on house tops, tents, back yards, piazza, fire-escapes, balconies, suburbs, country sites, etc., are all the one effort to obtain oxygen and at the same time to make your patient comfortable. And why oxygen, if it is not to modify or to get rid of the effects of carbon in the economy and to unite with the nutrients that supply the body, that the body cells may attract them and make exchange for the waste thrown in the circulation to be carried to the various glands to be eliminated? If this is so, we have a suggestive proposition to care for the waste and recognize it as a factor in the process of the disease.

It must be a fact that the bracing temperature that tones the nerve system to a high point of capability is a consideration that must be reckoned with in the general care of this class of patients.

If you have a patient with temperature above normal from malaria, measles, small-pox, scarlet fever and more especially typhoid fever, would you insist on his going to bed? My patients with typhoid fever who had temperatures above 101 and continued to go for a week or ten days before going to bed usually died, so I think it best to

have the tuberculosis patients keep the recumbent position when they have fever. Certainly the waste is greater than the gain, and a common law would be to have increased waste with increased power.

As to the use of tuberculine in the treatment of tuberculosis of the lungs, we may say that at the present time its value as a remedy per se, is questionable; there is no doubt that in many ways it can be made use of to advantage, for example: Injected in carefully chosen doses into a patient whose organism is vigorously combatting a tuberculous lesion may increase the combative power to the toxins of the disease, by the formation of anti-tuberculine, but it does not reach and kill the tubercle bacillus in the disease. Probably the greatest use of tuberculine at present is the reaction given in tubercular subjects as a means of early diagnosis.

Wright reports great results by the administration of very small doses, controlled by an estimation of the opsonic index of the blood, this at the present time is impractical for the practitioner. It has been pointed to this Society in the former paper that the iodide of sodium will give a reaction in beginning tubercle as well and just as decided as will tuberculine.

We must individualize each subject. The patient must be the battlefield and each and every condition met as the circumstances demand.

DISCUSSION.

Dr. Sweatland: I have here before you a patient whom I saw on the 21st of last September. She was able at that time barely to come to the office. She had an evening temperature ranging as high as 103. She weighed less than 100 pounds. The physical signs were all in evidence. It was not an early case. The sputum showed myriads of tubercle bacilli, streptococci, staphylococci and pneumococci. Expectoration was profuse. She had night sweats at times, but just at the time she came to me she was not having them. The physical signs gave cavity in the anterior portion of the right lung and the posterior portion of the left, and quite an induration extending down as far as the upper border of the ninth rib in the left lung posteriorly. Signs of cavity can be heard in the right lung today. The induration has disappeared, but the signs of cavity remain. The left side, you also can get signs of cavity. On the cavity in the left side is not as large as the cavity on the right. Probably the right side was the first lung involved. When I saw her first, the left lung had the larger cavity. Induration was greater on the left side at the time I saw her. As I say, the temperature ranged as high as 103 in the

afternoon, usually running to 103, the morning temperature being sub-normal sometimes, and a fraction above normal sometimes. The sputum was examined, of course, and at that time or a few days after I first saw her, and as I say it contained myriads of tubercle bacilli. Those have gradually decreased with the treatment, and the rest, and the feeding and the baths and eliminative processes that we have been through. I wish to say in compliment to the patient that she has been a very good patient. I want to say further that in private practice I find that the greatest difficulty to overcome is getting the absolute control of the patient, and being able to watch them almost from hour to hour, and ask them if they have been sitting up for so long a time, and if they have done this and that, and then being able to correct anything that has gone wrong. This patient has been a good one, and we have achieved some results. The patient is not cured. She is going to get well. I am satisfied of it from experience and from her general condition. The last time she weighed was about a week ago, and she weighed 126 pounds. She began gaining at about a pound a week. Not a rapid gain; it has been gradual. We kept this patient in bed three straight months without being up, without waiting upon herself, other than to answer the calls of nature in the same room. The temperature gradually lowered until about the end or the middle of the fourth month we had a normal temperature, and it does not now have a tendency to go down below normal in the morning as it did before. All expectoration has practically ceased. The expectoration that was gathered day before yesterday was reported on this morning by Dr. Gray as not containing any tubercle bacilli, and, as I say, repeated examinations previous to this had not given positive evidences. The evidences were all negative. But we have found our staphylococcus, our streptococcus and our pneumococcus present. Now, Dr. Gray, I want to ask you are the chains of the streptococci as long, and do you think they are the same as they were in the beginning?

Dr. Gray: Yes. I see no improvement in that.

Dr. Sweatland: I wish to say for about three or four weeks we began treating this case with streptolytic serum of Stearns, but did not seem to get any benefit from it in the decrease of the streptococci. The treatment has consisted of rest for over three months, in bed constantly, baths, packs to the chest for the cough. She never has taken an opiate. Elimination through bowels. Magnesium sulphate has been the principal eliminant. Phosphates have been given. Bran has been given her in the form of bran buns. Those are made by simply browning the bran in an oven,

covering it over and stirring it; not burning it, but browning it. Then it is mixed with just enough flour, or sometimes better browning the flour slightly with the bran, and mixed with enough of that to make it roll nicely, when you mix it with the sugar, buttermilk and soda enough to make them light. These are baked in an oven until they are crisp. She has been eating about two or three of those between her regular meals, and drinking a glass of rich milk with them. Her meals have consisted of vegetables, some lean meat, not very much, plenty of butter, cornbread, buttermilk, if she can drink it, milk and fruits. We have pushed nothing in the way of fat but the butter and the milk. Now, her gain has not been rapid at any time. She has had two or three different attacks of acute indigestion that have put her back, since the tubercle bacilli have disappeared, more than the condition in the lungs seem to put her back. It has taken her some days, a week or ten days sometimes, to get her over each one of these attacks, and it has really kept her down. She ought to weigh today 135 or 140 pounds, and she would have done so had it not been for these attacks of acute indigestion, due probably to her lack of knowledge of putting the proper food into the stomach. One time it was her fault. She ate a pickle or two and went to bed upon it at night, and she regretted it badly. She had a high temperature from it, running up to 102½ to 103 from that pickle. At another time something else came up and she could not resist it. But, I will say this, that whenever she has stuck closely to the corn bread made of the unbolted meal, whenever we could get it, and the bran buns mixed with enough flour to make them roll nicely, and the milk and the vegetables, cooked well and done, she has not had any digestive disturbances, showing that we have a pretty good digestive system here. I do not bring this case here before you and tell you it is cured. She is not cured. But she is going to be cured. She is going to get well. Why? Because I can control her. I have the absolute control. She is a good patient. She will do as I tell her. When I tell her to go to bed for a day, she will do so. If I tell her to stay there another day she stays there another day. If I tell her to get up she does so. She is constantly improving, she is constantly growing better and constantly growing stronger. She has slept in an open room all winter long. Of course, our winter has been mild here, but it has been disagreeable at the same time. She lives on one of the most dusty corners in Little Rock. It is on the north side of the street, with a southern exposure. We have sun light, and have had it all the time she was in bed. We have large windows both on the south and on the west, and

on the east also. Those windows have been open day and night. The only time we have put down the windows, and the only time we have had a fire, was when she had to take her baths. These baths came three times a day. And when her cough was bad, very bad in the beginning, she had a bath at midnight, with packs placed around the thorax and placed over the spine. She has not until the last five weeks been without a pack, wrung out of a magnesium sulphate solution, and placed around her chest. We add to this solution a little carbolic acid for its effect upon the nerve ends in the skin—the terminals of the nerves. It seems to soothe, and quiets the whole nervous system, and it is better than an opiate, unless the pain is very severe. If the pain is very severe, or sharp attacks from gallstones or appendicitis, it will not allay that pain, but any ordinary pain it will relieve entirely; it not only does that, but relieves the cough. I don't know exactly how it does it, unless it be because of the effect on the terminals of the nerves. She has not had an opiate or sedative of any kind. Our aim in this case was to raise the nerve power. In other words, she had a pulse that was greatly below par when I first saw her. It wasn't supplying the tissues, as it should supply them, with blood and nutrition. I tried to raise the nerve power, and to do that I used strychnine, and used it in good doses. We used it a little too much at one time, then dropped it for a time, but the nerve power is up, and it is there today, and she has got a normal pulse in every respect; possibly a little bit full today. I don't know that I can say anything more about the case. It is going to take some time, possibly a year and a half to cure the case, but we will cure it, and in eighteen months or two years.

Dr. Carroll: Were those baths hot or cold?

Dr. Sweatland: Hot.

Dr. Carroll: It seems that those hot baths of magnesium sulphate might knock out anti-phlogistine. It seems they might take the place of anti-phlogistine very well. It is an entirely new thought to me. While I haven't been advocating anti-phlogistine and haven't used it, I believe this is good, and I think I shall try it.

Chairman: We would like to hear from Dr. Turck.

Dr. Turck: I don't know that I ought to be in evidence again. This presentation is one of great interest, and, as brought out by the essayist, is of especial interest. Diagnosis is our only hope of treatment. The essayist called attention to the great importance of taking up these test cases and making a full examination of all the physical conditions, not only for the purpose of diagnosis,

but also to make a comparison of the progress of the case. But from the recent work with opsonins, we find there is every evidence of a lowered condition of the serum, that is to say, the bacteria are not affected by the serum sufficiently to allow the phagocytes to take them up because of the loss of substance in the serum in these cases which is not found in those who are not prone to tuberculosis. The form of treatment which he presented here and the proper feeding all have a tendency to increase these bodies in the blood. It is simply to kill the microbe. We are simply increasing the defenses, and those defenses are health. We are trying in this work to increase the anti-bodies and the opsonins in the blood. The last point in regard to the work is this: This open air life and baths seem all to have their one idea, and that is increasing the power of attack. So it comes back to the food going into the circulation that produces these changes. Open-air life and the stimulation of baths are all for the purpose of increasing nutrition, because that is the real ammunition that we are using to fight the disease with. I certainly think this case is one of great interest.

Dr. Frank Jones, Memphis: I heard the essayist's paper with considerable interest and profit. I want to accept every word he said with reference to the difficulties we encounter. I have for the last twelve years given the subject of tuberculosis considerable consideration. I see hundreds of cases of it a year, and while I see the ravages of tuberculosis daily in my practice, with reference to the future of this great monster I wish to say that I am an optimist. (Applause.) I believe that we have before us today one of the greatest fields of research that has ever come to us, even more so than the anti-toxin of diphtheria or the research work of Pasteur. I believe there is something in the opsonin. I believe there is something in the opsonic index. This opsonic business is going to be a solution, in a great measure, of the subject of tuberculosis, and I want to raise my voice as an optimist with reference to the future of this arch enemy. With reference to the early stages of tuberculosis, I want to raise my voice against one nomenclature. I want to put my foot down on one thing. The doctors talk about the "pre-bacillary" stage of tuberculosis. You may just as well say the "pre-typhoid" stage of typhoid fever, or the "pre-pneumonia" stage of pneumonia, or the "pre-malarial" stage of malaria. The pre-bacillary stage! I want some one to explain to me, what you mean by the pre-bacillary stage of tuberculosis. They examine his sputum and blood and don't find any tubercle bacilli. Then they hedge around and say that it means he has some evi-

dence of little exaggeration of pulse, or slight fever, or a little coughing, with no tubercle bacilli. That's the pre-bacillary stage! If tuberculosis is an infectious disease, and the tubercle bacilli is the etiological factor, then from analogy there is no such thing as the pre-bacillary stage of tuberculosis. If it is tuberculosis, it is caused by the tubercle bacillus, and if it comes from the bacillus there is no pre-bacillary about it.

With reference to some of the early findings, I am not as much enthusiastic on the auscultatory findings. While we get great benefits from auscultation, it depends upon how you auscultate. I don't take much stock in auscultation. You can't auscultate and percuss at the same time with any degree of benefit. Auscultate while you auscultate, and percuss while you percuss, one at a time. I attach more importance to percussion, percussion, percussion, in the early stage of tuberculosis. With reference to the symptomatology, the first thing you notice in nearly all cases of early tuberculosis, "pre-bacillary," if you want to call it that, is a marked accelerated heart action; a rapid heart action. Just what the heart action does I don't know, but it remains a fact, nevertheless, that this rapid heart action is nearly always found in early tuberculosis. I was glad to have Dr. Sweatland bring this patient before us. It is an object lesson to all of us. I have been doing some of the same kind of work in my clinic, just exactly on the line that he has done so much, and I want to say that we don't have to send them to Colorado, or Arizona, or to Asheville, N. C., or to these magnificent sanitariums where you have to pay from \$40.00 to \$60.00 a week, and \$10.00 every time the sputum is examined. I say the day is coming when the intelligent physician, by ferreting out these conditions, watching his patients, giving them air, whether it is in the Rocky Mountains or in the Adirondacks or in the swamps of the Mississippi Valley, just so it is good air, good food, good sunshine, good mental rest and physical rest, by recognizing the condition early enough, can cure these patients. We can have a sanitarium in our State. It is a burning disgrace that we haven't a sanitarium in our State. It is just as essential as to have a lunatic asylum or a blind asylum, and sometimes some of those who advocate not having a sanitarium for tuberculosis ought to be put in the lunatic asylum. (Applause.) I say we have before us opportunities to deal with tuberculosis. We should by united effort break down the barriers on the part of the laity, and make them realize what we are doing. Break down the prejudice. You will be astonished how much ignorance and indifference there is on the part of the so-called educated people. The educated peo-

ple give me as much trouble as the ignorant people. Day before yesterday there came to my clinic a negro girl about 19 years old. She had a cavity at the apex of the right lung, temperature 103½. She was expectorating everywhere. Her sputum was absolutely swarming with germs. What did she have in her arms? A beautiful little child about two and one-half years old, with a beautiful little white dress on, and the mother of that child lived on the most fashionable street in the city of Memphis. I can enumerate numbers of those cases. The trouble, I think, is with the intelligent people. We have the same thing to contend with in tuberculosis as we do in other conditions. I can remember the time that I had a child to die because the mother would not let me introduce anti-toxin for diphtheria. I had two cases to die because the mother said that stuff would kill the child. Look at the criticisms that have been heaped upon us in the newspapers on account of the mosquito theory for malarial and yellow fever; that it is just a fad and a fancy. The same thing confronts us with tuberculosis. We have to educate the people to the fact that tuberculosis is an infectious disease; that it is a disease that has its origin from a bacillus, just as other infectious diseases have, and that a person must be guarded and watched and have the co-operation of the physician, and until we do that we are not going to make the progress we ought to in the study and prevention of tuberculosis.

Dr. Kirby: I just want to emphasize the fact of its being contagious. The paper stated that a good many people insisted that it was not, but I want to insist that it is. I just want to mention one instance in my practice. There was a family that had no consumption in it. One of the family went to wait upon a person who had consumption and contracted it. I went out to see him, and he was spitting on the floor, bed and everywhere. I told him that if they were not more clean it would kill everyone of them, and in less than five years all would be dead. There were nine in the family, and one is living now, and that was only seven years ago.

Dr. Canfield: I was glad to hear Dr. Jones speak disparagingly of the custom of sending these patients abroad. I feel that more stress ought to be put upon that. It is a common thing to see some poor man or woman, boy or child, told to go off somewhere to get well, when they haven't enough to buy bread at home. It is impracticable. We, as physicians, must quit that foolishness, but we cannot do that unless we have a State sanitarium where they can be cared for by the State better than we, as practitioners, can care for them and attend to our general practice at the same time.

Dr. Sweatland: I think the paper covered the point that the doctor who has just spoken referred to, about sending patients away. There might be an advantage with some patients who have plenty of money and want to spend it that way, to go to New Mexico or wherever they wanted to, just so that they were satisfied in mind and taken care of in body. But to the average person this is suicidal, and I think Dr. Walt expressed that in his paper. Now, the matter of infection, I think, is thoroughly understood by the profession, but not by the laity. One thing that Dr. Jones mentioned, which slipped my mind, is in regard to the term "pre-tubercular." It is an evident fact that beginning tuberculosis cannot be diagnosed by physical signs alone, before breaking down has taken place, or any extensive induration has taken place. It can't always be diagnosed by physical signs. There is no pathognomic sign of the beginning. Tuberculin probably has been of the utmost benefit so far until the opsonic process came in. We don't know exactly what that will do. The doctor spoke of combining auscultation and percussion. I have always used that, with an assistant to do the percussion while I did the auscultating, and vice versa. To do it alone I think is quite difficult. I have never been able to get anything alone, but have been able a number of times to make a diagnosis satisfactory to myself with combined auscultation and percussion. The point we wished particularly to bring out in this paper was the fact that tuberculosis can be treated at home; that it can be treated by the physician himself, if he can control the patient. If he can't control the patient, he ought not to try and treat it. I say to them: "You have tuberculosis." If I think they can get well; they have enough lung tissue remaining to build upon. I also say, "If you want to get well, there is one road whereby you may possibly get well." If I can see that they are likely to get well, and if I am pretty sure of it, I say that I am positive of it that they can get well, and that makes the better impression. I don't know but what it would be better to do that, when you are a little afraid about the outcome, because you get the co-operation of the patient. And the first time they break from the rules, I say, "We might as well come to an understanding now. Unless you follow out the directions I give you exactly to the letter, you are going to die." It is generally sufficient, and generally brings them to the matter of control. They take their medicine. We expected to have a class here today of some three or four. I think there are about six other patients that we have under observation at the present time. One is a doctor, and the sputum is full of bacilli. We have had him in bed now about two

weeks, the temperature is gradually falling, the cough is practically over, and the expectoration is growing less, yet is full of tubercular bacilli. He has had several hemorrhages, but none since he went to bed. Just three days ago he developed a slight attack of appendicitis, and Dr. Turck has told us that we have been feeding him something we ought not to do. I think that is right. We have put him on a starvation treatment and he has not eaten anything for about fifty-six hours now, and our appendicitis has disappeared. The temperature, which I think was caused by the appendicitis, has disappeared. The temperature was 99 1-5, and it had been as high as 100. You can feed too much food just as well as too little. It is not the amount of food digested, but the amount assimilated and taken up by the cells and giving new life, and the casting off of the debris, etc. Watch the pulse. It tells everything, and it never lies. It cannot lie. It tells you always whether your bowels are moving, whether your skin is active without ever feeling the skin. It tells you a whole lot of things. Study the pulse. In the beginning of tuberculosis we have got something that we must be on the watch for all the time. I don't know, but I believe the pulse, in a majority of cases, will give you something that you can pretty nearly cast your eye into the lung and say, "This man has tuberculosis." It will pretty nearly do it every time.

A PLEA FOR A MORE EXTENSIVE USE OF MODIFIED COW'S MILK IN INFANT FEEDING.*

By C. K. Caruthers, Jr., M. D., Pine Bluff, Ark.

My excuse for appearing before you is not with a view of presenting something new or original in infant feeding, for we are all more or less familiar with the text book teaching of percentage feeding. But it is rather with the object of urging the profession to adopt the modified cow's milk in lieu of the many patent carbo-hydrate foods that are in use today. I am well aware that many of the physicians that prescribe them, or rather permit their patients to use these foods, do so because of the ease with which they are prepared, they having written directions on each package, thus saving them the trouble of furnishing a formula to the mother and teaching her the hygienic details that are so necessary to a successful carrying out of this form of feeding. But if they will compare the formula of these patent foods with that of

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mother's milk, a normal food, they would readily see that they are almost devoid of fat, an essential constituent of food, furnishing heat, respiration and nervous energy, to say nothing of the high percentage of both soluble and insoluble carbohydrates contained in these foods, which often produce green acid stools and skin eruptions.

Dr. J. E. Winters, of New York, says where mother's milk is seriously defective in fat, the fontanelle is greatly depressed, every mark of the profound innutrition is identical with what is witnessed where the food has been a fat-free cereal, and says: "This parallel should demonstrate to the most puerile, the sinfulness of the cereal fat, and the propagation of low fat. And when such facts as these, the results of scientific investigation, are presented, we, who wish to be guided by the light of science, cannot do less than relegate to oblivion, the statements of the food proprietors, who from purely mercenary motives, attempt to bias the judgment of the profession."

Of course, you know the object of modifying cow's milk is to make it conform chemically, as near as possible, to mother's milk, and to Rotch is due the honor of simplifying the problem, by dividing the milk into its component parts, and then combining them to meet the needs of the case in hand. He demonstrated by analysis, that cow's milk is composed of fat, 4 per cent; sugar, 4 3-10 per cent; proteids 4 per cent; salts, 7-10 of 1 per cent, and water 87 1-2 per cent. Mother's milk fat, 4 per cent; sugar 7 per cent; proteids, 1 1-2 per cent; salts, 2-10 per cent, and water 87 1-2 per cent. Thus he found in cow's milk an excess of proteids and salt, and not sufficient sugar, and to reduce the proteids, which gives most if not all the trouble in infant digestion, he found it necessary to dilute the milk and to raise the percentage of fat and sugar by adding cream and milk-sugar. It is not necessary that the mixture should contain the exact proportion of constituents as normal mother's milk, for there are some babies that do not digest their mother's milk perfectly, but what you desire is to have a mixture with sufficient nutritive elements to supply the demands of economy, and yet not more than the baby can take care of. There are three proteids of milk: caseinogen, lacto-globulin and lacto-albumen. Caseinogen when acted on by rennin, a normal constituent of the gastric juice, coagulates forming casein. The other two proteids are not affected, and as they are only one-fourth as abundant in cow's milk, we can easily account for the non-coagulable portion, that is, lacto-globulin, for the hard firm curd; whereas in human milk they are twice as abundant as the coagulable or caseinogen; hence, we get a light, flocculent curd

easy of digestion, and herein lies the physical difference of the two milks, and to overcome this physical difference, as well as the quantitative difference of the elements of the two milks, is the object of modification. Casein, the coagulable portion of the milk, is soluble in diluted alkalies, and by the addition of lime water to the food, we, in a measure, prevent the hard curd from forming. Some physicians advocate the addition of a cereal to overcome this objection, and others eliminate the curd entirely by substituting whey, but my experience has been, that if you reduce the proteids sufficiently, any well baby can digest them. Of course, in gastro-intestinal troubles, it is best to leave off the milk entirely for a few days, substituting egg albumen, which requires very little digestion.

To modify the milk suitable for the infant, it is not necessary to memorize formulae from a textbook. All that is essential, is to know the per cent of cream a given amount of average cow's milk yields, and the question of formula-writing resolves itself into a problem of mental arithmetic, which, with a little practice, enables you to write a formula suitable for a baby of any age. Of course, it may be necessary to change the percentage of some of the elements to suit the digestive power of that particular case.

Holt says, that the upper six ounces of a quart of good average cow's milk (placed on ice six hours), yields approximately twelve per cent of fat, the other elements remaining practically the same as ordinary milk; that is, fat, 12 per cent; proteids, 4 per cent; sugar, 4 per cent, and salt 7-10 per cent. To reduce this to any desirable percentage of fat and proteids, is only a matter of dilution, and to raise your percentage of carbohydrates, add sugar. For instance, if you wish to give a baby 3 per cent of fat, 1 per cent of proteids and 7 per cent sugar, you simply dilute three times with a 7 per cent sugar solution, and you have fat, 3 per cent; proteids, 1 per cent; sugar, 7 per cent. Should you desire even less proteids, and yet wish to give 3 per cent of fat, for it is unusual to find a baby that cannot digest 3 or even 4 per cent of fat, you take a richer cream, say 16 per cent fat, which is ordinary 12-hour old cream, dilute four times, and you have fat, 3 per cent; proteids, 8-10 of 1 per cent; sugar, 7 per cent. And to arrive at the amount of cream you desire to prescribe to make a sufficient amount to last twelve hours—about a 16-ounce mixture—just divide the number of dilutions plus one by the number of ounces of the mixture and you have the amount of cream. For instance, you had a dilution of three parts of water to one of milk, you divide your mixture by 4 and so on. For the sugar it is best to give the mother a box that will hold one ounce

of milk sugar, and instruct her to put that once full to 14 ounces of water to have a 7 per cent solution.

The milk should not be either pasteurized or sterilized, for heating, we are told, breaks up the chemical union of the proteid and mineral constituents, and with this union dissolved, the metabolism of the cells cease to functionate properly, and as a result long continued and many morbid states ensue. However, the milk should be pure and clean, and to secure this it is necessary in our larger towns where we are dependent on dairies for the supply, to have a Milk Commission, whose duties should be to inspect the dairies, and after analyzing the milk, furnish a certificate to those whose milk comes up to the required standard of purity and bacterial count, and warn the public against the use of milk from those that do not.

Dr. McCormack said, during the course of an address to a Pine Bluff audience recently, that Arkansas had eight hundred deaths from diseases of children due to using dirty, adulterated or spoiled milk, and that Herod was a novice in the business of the slaughter of the innocent, compared with our modern cities, and it would be cheaper to inspect the dairies and save the babies than it would be to bury them, but we can have clean milk, especially where the family keeps a cow.

I find in nursing babies, a feeding once or twice daily, is a good practice. It not only rests the mother, but makes weaning easy, and when the bowels are constipated and a waxy pallor is present, unmistakable signs of insufficient fat, a mixed feeding augments nature, which at this period of rapid physical development, is essential to the growth of a strong constitution; for, as most of our so-called hereditary diseases are but the result of faulty nutrition in the first years of life—the age of cell development—it is but natural to suppose that by keeping the somatic cell at the highest state of development by furnishing the most assimilative food we go far towards overcoming any strumous or other diathesis.

DISCUSSION.

Dr. Causey: I think this is one of the most important subjects that the average practitioner has confronting him. One of the most difficult problems I have ever had to contend with among the laity is that of infant feeding. It is the hardest matter in the world to get mothers, or fathers either, to understand that little fellows without any teeth with which to masticate should not just eat right off the table the same as anyone else. They will begin to feed them at six months old,

and sometimes younger. Now, I think that is a very valuable paper. I noticed an article in *The Journal of the American Medical Association* a short time ago, however, in which an entirely different idea was advocated. The author of the paper stated that the cause of the indigestion of cow's milk was not due to the excessive casein in the milk, but to the fat that was in the milk. He advocated a fat-free diet; to extract all of the fat out of the milk, and he stated that in his experience he had had no trouble with indigestion in these cases. He said that where you notice in the stools of the infants little white curds, when that is carefully examined, it appears to be fat, and not casein at all. I mention this for the consideration of this organization. I have had no experience in trying this fat-free milk diet, but it did impress me as being something new, and if there is anything that can be done to get cow's milk in any modified form so that it can be digested by infants, it certainly will be a great boon to infant feeding in our country.

Dr. Lutterloh: I never hear the question of infant feeding discussed but that I think of the experience we had with our only little boy. I was in Johns Hopkins hospital studying. We were feeding our child with everything in the world that a woman would suggest. I had a telegram from my wife stating that our little boy was very sick with cholera infantum. I came on, and met a very good doctor on the train, and told him about our little boy. He said, "You get an Arnold sterilizer and take it home with you and use it, and get an Arkansas scrub cow." I got the sterilizer and carried it all the way from somewhere near Baltimore clear down to Jonesboro, and when I got to Memphis, I saw just lots of those Arnold sterilizers advertised for \$3.00 apiece, and I had paid \$3.25 for mine and carried it all that distance. I told my wife what the doctor said, and we sent out in the country and bought an Arkansas healthy scrub cow for \$18.00. I could almost carry her under my arm. We fed that baby with cow's milk pasteurized. The doctor has struck the key-note. It is alright if you can get a milk examiner who would be an honest man, but these milk examiners are paid by the city, and city scrip is worth 60 cents on the dollar, and he will absolutely pass anything. But, with an Arnold sterilizer you can have what you want yourself, and if a man who has children cannot pay \$18.00 for a cow and \$3.00 for a sterilizer he ought to be put upon a farm. You can pasteurize it in fifteen minutes while your wife is cooking breakfast, and you have it all the time. I tell you I do not believe in this indiscriminate feeding of Horlick's Malted Milk and Mellin's Food. You can find all kinds of bugs and

baccilli that you can imagine after it gets old enough. Why use that, when you can have cow's milk, next to the mother's milk, with a pasteurizer that costs you \$3.00 and a cow that costs you \$18.00? You don't want anything better. I am sure it saved our little boy's life. I agree with the doctor, that you cannot be too careful.

Dr. Clegg: I have had two bad experiences, like Dr. Lutterloh, in my own family. In the first place, my observation is that very few children can be raised on the so-called patented artificial foods, whether Horlick's Malted Milk, Mellin's Food or what. They do not die so much of cholera infantum as of scurvy. A majority of those children, in my observation, if they are fed with those foods, have scurvy before they are two years old. There are not many children that will thrive absolutely on cow's milk, whether you sterilize it or not, whether you give them fresh milk or not. Milk is very poisonous to some children, as was illustrated in my own child. She was 1½ or 2 years old before I discovered that the nurses were giving her milk. They were endeavoring to feed her with milk—so was the doctor. Finally I let an old country woman take her to the country, and she fed it anything and everything, and it got well. Her baby is three years old now. Last year she was taken sick. She lives in Chicago, and the baby was sick all the summer. It was two years old then. The most eminent men in Chicago made a diagnosis of abdominal tuberculosis, with a prognosis that never materialized. I brought the child home in October. It had been fed scientifically and absolutely under the directions of the most eminent men in Chicago. The child was gradually growing worse. I took it and started on the dining car from Chicago, and the first thing I gave it was baked apples and cream. She lived on that for a month, and then began to eat other things, bread and butter, and we let it have anything and everything it wanted, and it went home in March practically well, and had gained about ten pounds.

Dr. Morehead. Like the gentleman who has spoken, I have had some personal experience in my own family. My two older boys, one now 16 years and the other 18 years, both larger than I am, were both raised on a certain proprietary food which I will call No. 1. I do not rise to advocate that food, but I want to say that if any man here or anywhere else thinks he can raise all the bottle-fed babies in the country on the same cut-and-dried formula he is making a mistake. I started with my first boy in Kansas. I didn't have an Arkansas cow, but a Kansas cow. In fact, we tried several of them, as the mother's milk was of no virtue with our first child. I tried

various foods; everything I could read or hear of. We finally got the boy started up-hill when he was about thirty days old with a proprietary food which I will call No. 2, and cow's milk combined, according to the regular directions. But, as I was unable to keep a supply of this brand on hand, I again resorted to Food No. 1, and had no further trouble with that child, nor with the next one. Then with our third child we tried the same plan with him in Arkansas. The second one was raised in Illinois. We tried Food No. 1 on the Arkansas child in the various forms prescribed with very unsatisfying results. Finally a druggist advised me to use condensed milk, and I did that. The boy is fat, and has been so ever since. What I want to emphasize is that these formulas are very good and helpful for children to which they are adapted. I find it easier to handle our cases in the country because we cannot have the food prepared according to these formulas in the country, and I find very often, as I did with my own children, when we resort sooner or later to cow's milk, in all instances we have trouble with them when we try to give it full strength. Diluting it one-half, equal parts of water and equal parts of milk, you get away with all those curds, until we increase the milk and make it stronger, and then it causes trouble again. I find dilution is all that is necessary in some cases.

Dr. Trotter: I enjoyed the paper, and I would like to agree with Dr. Morehead in regard to the feeding of different children. I have had quite a good deal of experience in feeding children; some in my own family, like Dr. Lutterloh and Dr. Morehead have spoken of, and in other families. Now, I think and believe, as I think most of the profession do, that, as a general rule, cow's milk is by far the best food for the great majority of children. If you dilute it, you have to dilute it in different forms and with certain percentages of water and milk. But, in a great majority of cases, cow's milk is by far the best thing. I know in a good many cases cow's milk will not fulfill the indication, or does not do it. We do not get it properly diluted or prepared, or there is something that does not have the desired effect. In my first child, my wife could not nurse the child at all. Some one suggested different things. I got the best cow's milk I could get and used it, but it didn't have the desired effect at all. Finally I resorted, as the doctor stated, to condensed milk. Some one suggested the use of the Eagle brand of condensed milk, which I did. She seemed to thrive, and was a healthy, strong, robust child until about a year or 18 months old. She had a spell of cholera infantum, and came very near dying. I attributed the condition to the use of condensed milk. I took her off the condensed

milk, and put her back on cow's milk, and she got alright, and is a healthy child now, five years old. My second child was one of the healthiest specimens I ever saw. She is 3 1-2 years of age now, and has never used anything except mother's milk. She has, of course, thrived and has never been sick scarcely at all, except during her teething. We do not let them eat anything and everything, as parents do, but modify their diet. I want to lay stress on the fact that it is not every time that you can prepare or fix cow's milk so that it will agree with the child. I acknowledge it is the best food we can use, simulating nearer mother's milk than any other food we can give. Still, sometimes it does not have the desired effect, and you have to resort to some of these other foods.

Dr. Caruthers: Regarding the gentleman speaking of a fat-free diet, of course we all know that a baby can not live very long without some fat. Normal food has 4 per cent fat; patented foods contain less than 1 per cent fat. I do not condemn patent foods entirely. I find in some cases, where you add a teaspoonful of cream to patented food to supply the fat, you get perfect digestion. I do condemn the exclusive use of patented foods where the per cent of fat is less than 1 per cent. I believe that the statistics show that the larger number of rejections for admission to the army and navy proved the applicants to have been raised on patent foods, as they had rickets, scurvy, and other diseases which prevented them from being eligible. Of course, this patent food, by copying the formula out of a book and giving it to the mother and telling her to use it, is not going to agree with the baby. You have to see the baby and change it according to the conditions that exist. I have often had to cut the proteid down as much as one-third of one per cent, and in that way I got rid of the fat which was demonstrated by the bowel action or stools. I always instruct the mothers and give them a formula. I give them a box holding 1 ounce of milk sugar, and instruct them to put that in 14 to 16 ounces of water, whichever I want, and have them put on ice. Then I get approximately the amount of cream I desire, and tell them that so many tablespoonfuls of cream should be put in so many tablespoonfuls of water; then warm it. It is very easily done. I don't see any necessity for pasteurizing when you have your milk fresh, and you can put it in the refrigerator in less than thirty minutes after you get the milk from the cow. Of course, we know if you raise the temperature of the milk no bacteria can grow in it. Of course, you should get a healthy cow free of tuberculosis, of which most of these country cows are. I believe also the best cow suited to babies is the Holstein. Jersey cows are more susceptible to tuberculosis, and they claim

the fat is in larger globules, but in a Holstein cow they claim the fat is in smaller globules. I think the real harm in the Jersey cows is you get 15 to 20 per cent of fat, while in the average cow and the Holstein is about the average—about 4 per cent. Condensed milk is not truly an artificial food. It is a condensed form of cow's milk, and it has only too much sugar and less cream. If you add cream to condensed milk, then you get a form of food that almost simulates normal food. I raised my first baby on modified cow's milk, and also my second baby while nursing. I find by giving two or three feedings a day the baby thrives better, sleeps all night and does not disturb the mother. I heartily endorse the mixed feeding, even in cases where the mother's milk agrees with them.

A NEW TREATMENT FOR PLACENTA PREVIA CENTRALIS.*

By W. H. Miller, M. D., Little Rock, Ark.

I offer no apology for again appearing before you with a paper on placenta previa, for while it is fortunately an uncommon complication of pregnancy, still it is followed by such unsatisfactory results that it is to be hoped we can at least offer a plan of treatment which will lessen danger to the mother. In these cases the outlook of the child is bad and the mother is the one requiring our attention. Like other obstetrical emergencies we are usually directed by the husband and other members of the family to save the life of the mother, and while the treatment I propose is applicable to other forms of placenta previa, I wish it to be distinctly understood that I am speaking of placenta previa centralis.

In order that I may be better understood I will review for a moment the anatomy and physiology of the placenta in a very brief manner. Edgar has probably given us the best description of the formation and action of the placenta, and I will quote in a modified form from his work. The maternal surface known as decidua serotina unites with the fetal surface the chorion which receives proliferations from the former, which separates it into partitions which receive irregular lobes called cotyledon, not unlike a muffin in the iron in which it is cooked. Around the margin of these partitions the decidua septa are more marked. The decidua vera is supplied with a network of blood vessels which is entered by the growing villi of the chorion. With continued

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development the vessels and capillaries of the maternal surface become large sinuses or lacunæ filled with maternal blood into which the chorionic villi extend freely, held in place by larger villa, which bridge over the parts of the placenta and attach it to the uterine wall. During normal labor nature controls hemorrhage from the placental site, by we will say, two methods. First, obliteration of these sinuses and blood-vessels in the uterine walls by contraction and retraction of its muscular fibers. Failing in this they are closed by coagula. With dilatation of the lower uterine segment if the placenta should unfortunately be attached there, we have instead an obliteration of these sinuses around the internal os, they are stretched and open wider under each uterine contraction, allowing blood to escape from both the maternal attachment and the placenta itself giving rise to the often called unavoidable hemorrhage.

Nature being unable to control or prevent the escape of blood by her surest plan, we must resort to our next best method, namely the formation of coagula which will be accompanied by a separation of the chorionic villi from the uterine attachment, and this is the plan on which I base my treatment.

It is a fact of common observation that there is less hemorrhage in cases of miscarriage or immature labor where death had preceded the expulsion of the fetus, than where it is born alive. The reason for this is, after the death of the fetus, separation of the placenta from its attachment at once commences somewhat like a preparation for the detachment of the placenta in a full term normal labor. So it occurred to me that if we could secure the death of the fetus long enough before attempting its delivery, there would be less bleeding. It is a well-known fact that in cases of central implantation of the placenta, pregnancy is almost invariably terminated before full term and then too often at the sacrifice of both mother and child. The child is so frequently lost that it hardly ever enters into the consideration of the treatment to be adopted; so we are justified in pursuing any plan offering to lessen danger to the mother.

The treatment I propose has never been tried by anyone as far as I have been informed, and consists in the following:

The patient being anesthetized, pass a pair of sharp pointed dressing forceps through the placenta and make an opening large enough to admit your index finger with which you feel the cord and bring it through the opening and ligate it. Tampon the cervix and vagina and let it remain for twelve hours after which part of the tampon may

be removed to see if it is effectively controlling the hemorrhage; if so place another tampon in the vagina. Uterine contraction may be stimulated by large doses of quinine and ergot and the os will be sufficiently dilated to allow the fetus to pass if contractions are not stimulated after waiting twenty-four or thirty-six hours after ligating the cord. Enough separation of placenta has taken place to allow its being detached without hemorrhage. The opening in the placenta is enlarged sufficiently to enable you to grasp the child, either the lower extremity with your finger or the head or any part with a pair of large dressing forceps and it is pulled through the opening and delivered. I have tried it in two cases, one of which I will now report.

Age about 35, the mother of several children, youngest being one and two and a half years respectively; seventh month of pregnancy, with typical symptoms of placenta previa. When I was called she was bleeding freely and just how much blood she had lost I am unable to state. Further hemorrhage I easily prevented by tamponing the vagina and cervix with sterile cotton and gauze. Eight hours later she was placed under an anesthetic and put on the table and after the usual preparations of cleaning and scrubbing I introduced my hand into the vagina and could feel the placenta through the cervix. I punctured it with a small uterine dilator through which I passed my index finger and grasped the cord and pulled it through the opening and tamponed around it to prevent further escape of liquor amnii and prevent bleeding from the placenta. I then ligated the cord and tamponed the vagina, which dressing was allowed to remain until the next morning and another applied. The next evening the os was dilated some, I enlarged the opening in the placenta, grasped the head of the fetus with a pair of large dressing forceps and delivered it through the hole in the placenta which was still further enlarged. The placenta immediately came away and a hot water irrigation completed the procedure. During actual delivery I am sure the woman did not bleed a teacupful and she was taken from the table in as good condition as you would expect from an ordinary curettement for retained placenta.

The second case was very similar only I did not apply the tampon until I had brought down the cord and ligated it.

I know that one swallow does not make a summer or one acorn make a forest of oak trees, so these two cases are not sufficient to place this treatment on a firm footing; but I shall be glad if any of you will try it when an opportunity presents itself. I shall also appreciate it if you will kindly let me know the results you have obtained.

DISCUSSION.

Dr. Dibrell, Van Buren: The treatment described by the essayist is, I understand, for cases of placenta previa centralis. I would like to ask Dr. Miller in closing the discussion to outline his treatment for the other forms of previa. It has been my misfortune to have a large experience in this condition, and the reason my hair is so plentifully streaked with gray, no doubt is due to handling these cases. (Cheers.) I have treated them all in the old way. I do not now recall all of them, but they have been reported in the proceedings of the Arkansas Medical Society in former years. In two or three of these cases the child was strangled by getting its mouth filled with blood. These were well advanced cases and the child was viable in a majority of the presentations; in the other cases, except one, the child and the mother are alive today. I do not believe that there is any safety for the mother as long as placenta previa centralis exists, and I agree with Dr. Miller that the uterus should be emptied as soon as a diagnosis of this condition is made. However, these cases that I have mentioned in which the mother and child are alive, were treated in the radical way and the results were all that could be expected; but, as Dr. Miller has so aptly remarked, "one swallow does not make a summer." I was very much pleased with the paper, and if placenta previa centralis ever presents itself again in my practice, I think I shall be inclined to try the method proposed. I hope, however, that if Almighty God is willing, He will spare me from ever having to see another one of these cases! (Applause.)

Dr. Young, Springdale. I would like to ask Dr. Miller how ligation of the cord would obstruct circulation in such a manner as to prevent hemorrhage. As I understand it, the hemorrhage in placenta previa is from the mother and not from the placenta. I do not understand how ligation of the cord would prevent, or in any manner have any effect on, the hemorrhage. I have been fortunate enough not to have a single case of placenta previa in my practice; but I think, should I see one, and find that it was impossible to deliver with safety to the mother, or with reasonable safety, by version or some other means recognized as regular, I should certainly hesitate before sacrificing the life of the child after it had arrived at the viable period. If there were nothing to offer besides, I should certainly perform the Cesarean section in order to save the life of the child; because I think the mother stands as good a chance under the Cesarean operation, as in the ordinary procedure for placenta previa, and you have every chance to save the child. This treat-

ment means the death of the child, and while I may not be absolutely clear in the matter, I feel now that I shall never again willingly sacrifice the child's life except under very extreme circumstances. I have one craniotomy to my credit, for which I am now and always will be sorry. I feel that any procedure that willingly takes the life of the child is wrong, and I would rather subject the mother to more risk than to sacrifice a life willingly. I do not believe that the Cesarean section, done under the every-day obstetrical surroundings, would put the mother in any worse condition than it would be to tampon her and leave her twelve to twenty-four hours, even under close examination or close watch. As I said before, the question I need further light on is how the ligation of the cord is supposed to prevent hemorrhage from the mother.

Dr. Dibrell, Van Buren: If the gentleman will pardon me for rising again, as no other physician seems moved by the spirit, I wish to call Dr. Young's attention to what a trying ordeal the practitioner is subjected in treating placenta previa. You have but little time in which to get ready for Cesarean operation when the baby is close to the cervix. You will have to get busy, *and get busy now!* When you see the blood flowing out, you will find out how busy you will have to get! Dr. Gibson can no doubt tell him something about that. I think the essayist preceded the reading of the paper by saying that it was a mode of treatment for placenta previa centralis. I think perhaps Dr. Miller was right. I believe I have stated that I have had three cases of my own. If I mistake not, I have had a fair share of puerperal convulsions, and everything else that pertains to the placenta. In my own practice I have had not less than one dozen cases of placenta previa. This may sound unreasonable, but I assure you it is the truth. It seems to me that they all come to me. My brow is seven or eight shades whiter than it was when I saw my first case, and if I ever see another one, I don't know what color it will be. I honor Dr. Young for interposing objections and stretching out his hand to save the baby. All of us feel that way, and every man wants to do it; but those of us who have had experience along this line, know the difficulties that beset us. When Dr. Young encounters his first case, I want him to write me about his Cesarean section in some log cabin ten miles in the woods, with no one to help him but an old negro "mammy." (Applause and laughter.)

Dr. Young, Springdale: I would like to ask for what reason we should tie the cord and expect that to stop the bleeding? Whether he did that or not, I do not know. I will say, however, that I did the Cesarean section once under very adverse

circumstances, and I do not wish to say that it is matter to be treated lightly. We are talking now about placenta previa, and I would rather try some well recognized procedure. I have mentioned version and the Cesarean section, both well recognized procedures. In the case I speak of there was no hemorrhage. The child had arrived at the viable period. It seems to me the practitioner should select only such cases as are suitable for Cesarean section. If there was profuse hemorrhage one would have to be guided by circumstances. We can all give our experience. I have my first case to see, but when I do I shall undertake only such measures, under the circumstances, as I feel qualified to carry out.

Dr. Canfield, Siloam Springs: You all know my position in matters of this kind. Four years ago I read before the Section on Obstetrics a paper entitled, "Saving the Baby," in which I emphasized the need of using every effort to save the newborn baby. Touching upon the subject of placenta previa, I offered a plea for the method employed by an eminent German physician, by which he reports saving fifty per cent or more of the cases. If there is any recognized procedure which can produce such results, certainly the time is not ripe for either the Cesarean section, with all its dangers and difficulties, nor the common presumption that the child must die, nor Dr. Miller's expedient of tying the cord to keep the mother from bleeding nor to keep the child from bleeding to kill the baby; because experience shows that in abortions and in miscarriages, when the child is born dead, there is great hemorrhage, and often more profuse than when the child is born alive. This is probably borne out by the experience of others who have treated such cases. Let those who differ from me speak out. I wish to enter my protest as one of the small units of this Society, against killing the baby as a styptic in placenta previa centralis.

Dr. Miller: Mr. President, I am glad that there is so much left of me after the vigorous discussion which has been elicited. In regard to advising what to do in other forms of placenta previa, this treatment depends, of course, largely upon the condition that is found at the time. There is no good reason why the woman should not go to full term, if kept in bed, under close observation and under the care of a trained nurse. You might then be able to carry your patient two or three months; possibly by that time the child would be viable. In that case it would be out of the question to take the life of the child,

because the chances are very favorable that it will go on and complete the full term; or if it don't go to that, at least far enough for it to be treated by other methods. I do not wish it to be understood that I am indiscriminately recommending the death of the child. I don't know how many cases I have met with; the number cannot be as great as those treated by Dr. Dibrell, but in those cases I have had, I have never seen but one that would anything like approach those he has reported. That was a case of Dr. Lindsey's; the child was born dead and the mother came very near dying. You will find cases where they will come to you and say: "Doctor, you have been too slow; my wife bled to death." Now, if a man is run over by a street car and has his ankle crushed, it would be advisable to remove the injured foot. You would tell him that it is your duty to amputate in order to save his life; but you cannot force him to submit. You have neither legal nor moral right to take him to a hospital, give him an anesthetic and amputate the limb. It is true, you can, if necessary, retire from the case, but you have no right to force him to submit to the amputation. Now, take a case of central placenta previa. You recommend Cesarean section. Possibly the patient is in favorable circumstances. You have not the legal nor moral right to force her to submit to it; and, in a great many cases, she will not. They will say to you, as I have had them to say to me, "Doctor, save my wife!" Now, another thing that might have some bearing on these cases of placenta previa, is that the patient has usually borne a great many children and in a few months is pregnant again. Cesarean section, I think, is justifiable in these cases; and before I would recommend destruction of the child, I would always offer it to the mother. I have done one Cesarean section and the woman was well on her way to recovery. She did not want to live and jumped out of the window and committed suicide. I think Dr. Young's point is well taken. If we feel that we are able to do it, are prepared and have time, and circumstances will permit, and the Cesarean section can be arranged, why, all right; I would be perfectly willing. The case which suggested this treatment was that of a woman who was walking about the yard, and stepped across the porch to a bench around the well, at which time she was taken with a severe hemorrhage and continued to bleed until she was almost exsanguinated. I was sent for and applied a tampon. I know the child was alive at that time. I expected this treatment possibly to control the hemorrhage, and let her go for a little while

longer; but the hemorrhage had been so severe, the child must have died from the hemorrhage coming from the placenta. Instead of being returned to the mother it began to escape and was lost, and the child died. It controlled the hemorrhage in that case. It was in the afternoon. I removed the tampon that night about ten or eleven o'clock, and to my surprise and astonishment there was no further hemorrhage. I waited a little while, but there was still no flow. I removed the child without hemorrhage from the placenta or mother. As to whether or not ligation of the cord will prevent hemorrhage. If the death of the child will allow separation of the placenta in abortion or miscarriage, in my opinion, there is no good reason why it should not in placenta previa; other than that in placenta previa we almost invariably have placental adhesion. When blood ceases to flow through the placenta the villi at once begins to separate, the sinuses are closed, the placental area is obliterated, and in that way I account for the success of the treatment. In reply to Dr. Canfield. I expected him to have a good deal more to say than he did. He has demonstrated to this Society on a prior occasion his ability in saving the new born. He, of course, is an enthusiast on that subject. We all ought to be. If we all were to exercise a little more care and a little more zeal and energy, I believe we would save a great many premature children that we lose now. In regard to the tampon treatment. I have tried it in cases of placenta previa. If you leave the tampons in the vagina for forty-eight hours, you may have infection; that is one of the great dangers we have to overcome in placenta previa. We have profuse escape of blood, there is severe hemorrhage, then the capillaries are empty. Now they take up septic material, (and they do in many cases), it will result in puerperal infection.

Now, I want to emphasize this one fact: This procedure is for placenta previa centralis. I have tried it in other cases where I found the hemorrhage was so severe that the patients were in a very unfavorable condition, and where they could not be watched and observed carefully and it worked well. In cases other than placenta previa centralis, I would not recommend any one to do it. The only question in my mind is whether or not in these cases where separation of the placenta takes place if these villi become atrophied and separate from the uterus as they do in cases of premature delivery resulting from death of child, I cannot see any good reason why they should not in placenta previa.

UMBILICAL HERNIA.*

By T. F. Kittrell, M. D., Texarkana, Ark.

Varieties: 1. Congenital hernia of cord; 2. Umbilical hernia of infants; 3. Umbilical hernia of adults.

1. Congenital hernia of cord. Most of these cases die, but of recent years there have been some cases reported in which recovery followed operation which consisted of a free incision in skin near amniotic margin, separating adhesions, and layer suture. These cases if operated upon at all need operation in the first day or two of life.

2. Umbilical hernia of infants. These herniæ are rather frequent; most of us see a few cases every year. They are usually small and emerge from upper part of umbilical ring between umbilical vein and free margin of ring. The umbilical ring is weak for several weeks after birth, and it takes some time for the obliteration of the vessels and contraction of the ring to take place. If at this time the baby has much straining at stool or during micturition, due to phymosis or from crying as I have seen during pertussis, then a small hernia may develop. Adhesive plaster strips make the best support in these cases and most of them recover after this simple method of treatment in a few weeks if they are treated early. I usually put on two or three transverse strips of plaster, fasten the outer ends and pull both toward the median line, the umbilicus being inverted and covered with a pledget of cotton. These strips are left on for several weeks if they cause no irritation of the skin. If they do irritate, they are taken off earlier and others applied. Operation should be done in many of these cases that are not cured by the above simple method. Graser says if infantile umbilical hernia is not cured by the time the child is ten years old, then operation should be done.

3. Umbilical hernia in adults occurs much more frequently in women, especially those who have borne children and those who have reached middle life; obesity nearly always co-exists, the abdomen is pendulous, ascites, tumors, etc., in fact anything which distends the abdomen and increases intra-abdominal pressure, is liable to cause a hernia; the recti muscles are stretched and atrophied. These herniæ in adults usually increase in size. They contain omentum and usually a part of the small intestine. The ring is often large, several inches in circumference.

Strangulation is not very common and often the symptoms do not come on so rapidly as they

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do in other forms of hernia. The results of operation in the past have not been good; there are several reasons why this is the case. Age, pendulous walls, obesity with atrophy and wide separation of recti muscles which can not be brought together without tension and which often separated cause a recurrence. Some years ago, W. J. Mayo in a paper read before the American Academy of Railway Surgeons, recommended overlapping of the aponeurotic structures either from above, downward, or from side to side. He stated that of the two methods the former was much easier. He describes the operation as follows:

1st. Make transverse incisions around umbilicus and hernia, deepening them to the base of hernial protrusion.

2nd. The surface of the aponeurotic structures is carefully cleared for $1\frac{1}{2}$ inches or more in all directions from neck of sac.

3rd. The fibrous and peritoneal coverings of the hernia are divided in a circular manner at the neck exposing its contents. If intestinal viscera are present, adhesions are separated and restitution made. The contained omentum is resected along with sac without trying to dissect the adherent portions from each other.

4th. An incision is made through the aponeurotic and peritoneal structures of the ring extending one inch or less transversely to each side, and the peritoneum is separated from the under surface of the upper of the two flaps thus formed.

5th. Beginning from one inch or more above margin of the upper flap three to four mattress sutures of silver wire or other permanent material are introduced, the loop firmly grasping the upper margin of the lower flap; sufficient traction is made on these sutures to enable peritoneal closure with running sutures of catgut. The mattress sutures are then drawn into position sliding the entire lower flap into the pocket previously formed between aponeurosis and peritoneum above.

6th. The free margin of the upper flap is fixed by catgut sutures to the surface of the aponeurosis below and the superficial incision closed in the usual manner. In large herniæ some of the fibrous coverings of the sac may be used in making the sliding flaps. I have quoted from Mayo's original article as well as from Binnie's article on this operation.

I wish to report a case of strangulated umbilical hernia. Mrs. F. M. C., age sixty years, two children, usual weight 180 pounds. Has had a hernia twenty years. Had worn trusses seventeen years. Has been necessary to call a physician to reduce it twice during that time. Came to

sanitarium November 26, 1906. Hernial protrusion at umbilicus the size of large fist, very red, indurated, looked almost as though pus might be present, pain and tenderness, no movement from bowels for thirty-six hours (the time hernia had been strangulated) pulse rapid and weak, low temperature and expression anxious. She was carried from ambulance to operating table and operated upon by the Mayo method described above with some slight changes which were thought advisable, but which did not alter principle of operation. I used chromized catgut as Ochsner advised, instead of silver wire or silk as recommended by the originators of the method. Upon opening the sac I found a great mass of omentum with old dense adhesions; in the center of the mass was nearly a foot of small intestine which was of a dirty brownish color. We took quite a little time, probably half an hour using hot salt solution poured from pitcher and hot towels applied over gut trying to bring about a change of color. Finally there was a slight change and we decided that the circulation was being re-established and replaced gut in abdomen, while using hot applications. We had ligated and removed the large mass of omentum. After abdomen was closed our suture line, about nine inches in length, lay transversely across abdomen and had taken up quite a little of the slack in the abdominal wall. She convalesced very nicely and with the exception of the infection in the thick layer of fat (it was two inches or more in thickness), we had no trouble. She was in hospital thirty days and after going home stayed in bed two weeks.

She wrote me the latter part of March that there was no hernial protrusion; she does not wear a truss but wears an abdominal supporter. She says general health is good; she thinks her weight is about 160 pounds now.

DISCUSSION.

Dr. Thibault: While the doctor's paper does not bring out any new points in regard to the treatment of this condition, it calls our attention to one of the most neglected conditions found in the lower class of people. It exists among negroes to an alarming degree, especially among the children. Umbilical hernia is one of the most common conditions and one of the most neglected. I distinctly remember a patient that was referred to me about three years ago that had had intermittent diarrhea for—I don't know how long—several months at least. She had been treated by the "absent method," that is, her husband called at the physician's office to get medicine.

The physician never saw the patient. I received a note from the doctor telling me to take the case

and treat it; that he could not do anything to benefit her. The husband brought the note without the patient. I refused to prescribe until I had examined her. I found an umbilical hernia, with sufficient strangulation to interrupt the flow of the feces. The patient would have a few days of absolute constipation, and then a few days of diarrhea. These conditions are neglected, and as a general rule, are among ignorant people.

A few days ago there came to my notice a case that shows how much and how far the ignorant class of people sometimes go in the other direction. A young man telephoned me to come in a hurry; said he had strangulated hernia. I went to see him and found he had inflammation of the spermatic cord and varicocele on the left side with considerable pressure on the vein. Examination showed that he had no hernia at all. The history of the case was about as follows: When he was a boy about fifteen years, he got hold of some literature descriptive of cures for rupture, etc., and after reading them, decided that he had a rupture also. He bought a double truss, and for ten years wore it, ignorant of the fact that he had no hernia and never had been afflicted that way. I had some difficulty in convincing him—and it was hard work to persuade him that it was not necessary to wear a truss—that if he continued to apply pressure on the veins, he was in danger of horizontal lesion of the backbone. All his trouble arose from trying to treat a hernia that he had never had. He has now been going about three weeks without a truss, has no hernia, nor any symptoms of it whatever.

The negroes get along very well with umbilical hernia out in the country. About fifty per cent of them are affected by it. Some of them disappear spontaneously; but most of them last through life. I had one case of pregnancy, in which the distension of the uterus separated the recti muscles. The patient however had no trouble in labor. She got very little necessary help from the action of the abdominal muscles.

THE DEVICES OF CHARLATANS, OR THE "BLACK ART" IN MEDICINE.*

By L. H. Morphew, M. D., Stuttgart, Ark.

In all ages and among all nations the physician has been the object of veneration. The heathen adored him and deified Aesculapius. The Indian with all his perverseness and cruelty, regarded the "Medicine Man" a demigod. Surely then, something more is expected of a doctor than of the common herd. If the doctor is not inspired, he

is at least conversant with the gods; we might therefore expect, that one whom all the world semi-adores, would rise superior to all mankind in honesty and truth: that he would be uninfluenced by "Vanity," unseduced by "Lust," and unbiased by "Lucre." But alas! with all the honor, reverence, and veneration paid to him, he is oftentimes found to be but a man and a very low-grade one at that. We frequently find him vigorously engaged in besmirching his neighbor's reputation and deceiving the laity. I propose in this paper to consider some of the tricks, the artifices, the fineness of the scoundrels in the medical profession.

The anatomy of man shows such design, such skill, that the doctor is compelled to believe in a designer, who is entitled to adoration and worship. Still it does not follow that he should join the most popular church, and sit in the Amen corner to be called out when the worship is in full blast. A medical fraud is generally a religious fraud also. He is always endeavoring to pass for what he is not.

"Appearing like a very saint,

While everybody knows he ain't.

His autograph with an 'M. D.'

Is all the evidence we see."

Soliciting patronage is a common custom among low-grade doctors. Of course, gentlemen never do this. A layman of any raising would scorn such a sneak.

Getting one's name in the press for some skillful surgical operation performed is a very questionable practice. Of course, no one is responsible for reporters nosing around, but the technical language employed, gives the operator away.

Making so-called "Specialty" of some disease, is a very common latter-day practice of the mountebanks. They have a corner on some part of the human anatomy. The more respectable are not "Cancer Curers;" they generally commence on the eye, nose, and throat; failing in these, they go down to the rectum and attack piles. In large cities, making a "Specialty" of some particular branch in medicine is doubtless a useful thing. but in a country town it is a deception, a fraud.

I have yet to make the acquaintance of one of these fellows who possess any superior skill or knowledge of any branch of medicine or surgery that the average general practitioner does not possess.

"Their skill is but a make believe,

A trick the ignorant to deceive."

*Read by title in the Section on State Medical and Public Hygiene at the Thirty-first Annual Session of the Arkansas Medical Society, held at Little Rock, May, 1907.

Taking an extraordinary interest in the family of patrons is always suspicious of hypocrisy. If such patrons happen to change physicians, the former deep interest changes to conspicuous neglect.

Making presents to children is captivating to mothers. Well, if a doctor has nothing else to recommend him to favor, he may be excused, as this is quite innocent.

Extraordinary attention to patients catches the fools; quacks, are on to this. It captivates the ignorant layman whose confidence in the unpossessed curative power of drugs is boundless. Drugs blind the ignorant; they close their eyes to the mountebank's failure; in diagnosis the quack always comes in on the "blind." He loads up with Syr. Trifol. Comp., Antitoxin, Elix. Iodo Brom. Cal. Co., Harlem Oil, and an abundance of pills, and fires them at the patient in the dark.

Some doctors have the reputation of being good nurses, which means going often and staying all night. They wake the patient every half hour, take his temperature, feel his pulse and look at his tongue, and then dope him with some useless drug; this is what the laity call good nursing. With them nursing has no reference to hygiene or feeding; it is meddling and drugging, which is the fraud's forte.

With many style is the hope of success; a genuine physician has neither time nor inclination to put on airs.

A common trick practiced by the scoundrels in the profession, is informing the patient, "They arrived just in time to prevent a funeral."

"The Doctor who such thoughts inspire,
Is always either a fool or liar."

The number of lives doctors have saved when they get there on time, are by no means countless.

"Should nature once set up her claim,
'Twould quite obscure the doctor's fame."

Getting there too late, is a common subterfuge of quacks. Boasting of an extensive and laborious practice, is an every-day practice of the liars in the profession, and these fellows can always be seen riding over the country, visiting "imaginary patients." They are execution proof; their promise to pay always goes to protest. A promissory note on a jaybird, would bring more on the market than these busy doctors.

Consulting with quacks and irregulars, is a practice that gentlemen are never guilty of. Some who do this, claim to do it in the name of humanity, but the fee is always at the bottom of all such consultation. This fee is the prize of honor, the value of self-respect, the reward of disgrace.

Adepts in the "black art" keep aloof from medical societies, and this is an earmark by which they may always be known. No disease comes up that the quack is not familiar with—"Have seen a good many cases like it."

The quack's mistakes in diagnosis are caused by diseases "running into each other;" of course, none but the ignorant, believe it.

Most of the homeopaths are frauds. While professing to use their remedies only, they deluge their patients with allopathic prescriptions. If they are severely sick genuine homeopathy is good treatment in slight ailments—so is medical Nihilism.

Among all the mean tricks practiced by the frauds, none is more common or meaner than cutting on fees. Cheapness is always suggestive of worthlessness in everything, especially in medicine. Men of brains never buy cheap goods, much less will they employ cheap doctors.

If Judas Iscariot had been a doctor he no doubt would have been a cutter in prices. He would have been a cheap doctor and would have ridden ten miles for \$2.00; but he had one redeeming feature that cheap doctors are void of, "*remorse*." When he went home from the Supper and thought how cheap he had sold his Lord, he hung himself. If cheap doctors had his compunction, they would be found hanging along the roadside.

But for a sordid and penurious laity, cheap doctors would soon come to grief. The man who employs a doctor for cheapness, would give his baby five cents to retire at night without eating, steal if after it is asleep, and should it die before awakening, he would bury its dead body in a paper coffin.

But some doctors are probably excusable for their cussedness: they got it by inheritance. A rattlesnake is blameless for biting; this is instinctive in the animal. Some men are born mean and live mean. There is no law to prevent a doctor from committing any of the above tricks, and it is ferninst the laws of our country to murder him, so we must wait patiently until he dies.

SURGERY OF THE RECTUM, WITH PARTICULAR REFERENCE TO FISTULAE AND HEMORRHOIDS.

By Dr. Allen E. Cox, Helena.

Within recent years advances in surgery have been, as it were, by leaps and bounds, and during the last decade advances along certain lines have been little short of phenomenal. We know there is scarcely a part of the human body that is not invaded by the surgeon's knife; in fact, some of our most vital organs are frequently subjected to definite surgical procedures. Even tissues whose function keeps them in continuous action and whose action is immediately essential to life, can be, and have been, successfully attacked by the surgeon.

The rectum is one of the organs of our body that is almost daily attacked by the surgeon. When necessary it can be even sacrificed in order to conserve the health of our patient. Its field has a definite place in our literature. Proctology as a specialty is well and thoroughly established. Men of no less standing than Mathews, Tuttle, Gant, Pennington, etc., devote solid time to this important branch of surgery. That part with which I shall have something to do in this paper, is some of the commoner morbid states of this organ, conditions as met by the general practitioner who has to deal with them in his everyday practice. One thing that I desire to especially impress at this point is to examine our patient when he or she comes to us for advice. In my opinion, it is the rule among general practitioners to take a patient's own statement here; and where there are symptoms of hemorrhoids, a prescription for pile ointment is given; or if symptoms of constipation are present, one of cascara sagrada, etc., is given, instead of carefully inquiring into the history of the case; and if there is anything therein which is not clear, subjecting the patient to an examination, so that an exact diagnosis may be made and an intelligent treatment promptly instituted. If this plan were universally adopted, in my opinion, much suffering would be saved to the patient; and, in some instances even life saved, and often life prolonged. A digital examination in most instances will determine whether or not our patient is suffering with hemorrhoids, fistulae, etc. Should the digital examination not fully satisfy us, then we should use a Cook's rectal speculum, under good reflected light, when the sense of sight will be added to that of touch in making out our diagnosis. The diagnosis made, the management

of all cases hemorrhoids and fistulae is plain and can be successfully met by every practitioner in this audience.

Our patient is prepared in the usual way by giving a purgative the evening before to be followed next morning by an enema. The choice of methods in the management of hemorrhoids depends on the kind of tumor we are to deal with, both as to its location, whether within sphincter, or external thereto, constituting the well defined internal and external hemorrhoids, size of tumors, duration of the trouble, age of our patient and most of all one's familiarity with a given method of operating procedure.

The injection method I mention principally to condemn because it is hazardous, it matters not what kind of an injection fluid is used, and once deposited within the tissues it is beyond our control, and there is no way of estimating just how far reaching its irritating effects may go. I have seen a case where the entire rectal wall on one side has broken down and sloughed away as a result of a small amount of carbolic acid having been injected for the cure of internal hemorrhoids.

The ligature method under a general anesthesia has given very satisfactory results in the hands of eminent operators. Mathews, whom to know is to admire if, indeed, not adore, says: "I do not think it can be gainsaid but that the ligature is the easiest of execution, safest in its results, accomplished with less pain, and the convalescence quicker than other methods of treating internal hemorrhoids. Again, it can be asserted that most of the leading specialists and distinguished surgeons of both this country and Europe, prefer it to all other plans. It can be done under strict antiseptic precautions, and statistics will show that fewer deaths have followed its use than any of the other methods."

Allingham says: "I do not think in the whole range of surgery there is any procedure worthy of the name of operation which can show a greater amount of success, or smaller death-rate than the ligature of internal hemorrhoids."

Until about six years ago, I practiced the ligature method almost exclusively for internal hemorrhoids as detailed in a paper read before the Tri-State Medical Association, of Mississippi, Arkansas and Tennessee, in November, 1900. The technic practiced was essentially the same as given by Mathews.

Since that time, however, the clamp-cautery method has become to be a favorite with me for the reason that it is easier for me to perform, the results are eminently satisfactory and convalescence shortened. In making this claim for the clamp-cautery method, I am aware of the

*Read in the Section of Surgery, of the Arkansas Medical Society, at the Thirty-First Annual Session, Little Rock, May, 1907.

fact that many of you will take issue with me on this point and you can cite good authority to prove your contention. My experience guides me, however, and, after all, one's experience with a given method is the one criterion from which he can draw deductions or make conclusions. At the seventh annual meeting of the American Proctologic Society, Dr. James P. Tuttle, of New York, under the caption of "The Office Treatment of Rectal Diseases and its Limitations" has this to say: "The trend of practice in rectal diseases at the present day is three-fold. First, toward a more general resort to operative measures. (2) Toward a wider application of local anesthesia. (3) Toward a great increase in office treatment. These tendencies are due to the following facts: First, the public as well as the profession has learned that non-operative measures cannot be relied on for permanent cures. Second, dread of general anesthesia has greatly diminished, due chiefly to improved methods in the use of ethylchloride and nitrous oxide, alone are adjuvants to ether. Third, dissemination of the knowledge that most of the minor rectal surgery can be done under cocain or other local anesthetic with as little pain and almost as little detention from business as is occasioned by the non-operative measures which give only temporary, and uncertain relief. Fourth, local anesthesia is being more generally adopted, because it is safer, can be quickly applied, simplifies the work, and at the same time, if properly used permits of as thorough work as general anesthesia. Cocain, eucain, stovain, in one per cent solution and sterile water, are all reliable local anesthetic agents. Stretching of the sphincter has heretofore been the most difficult thing to accomplish under local anesthesia, but Tuttle referred to a method he had devised, making it possible to operate painlessly on hemorrhoids, fissures, small fistulae, ulcerations, tumors, low down and even low strictures. Certain conditions are requisite: (1) Asepsis; (2) careful selection of cases; (3) complicated and plastic operations, not to be undertaken; (4) when general anesthesia is necessary it is better to have the patient at home or in the hospital, even though it may be possible to do the work in the office."

To S. G. Grant, also of New York, belongs the credit of bringing to our attention what is commonly known as the hot-water analgesic method of dealing with hemorrhoids as well as fistulae and some other rectal troubles. It is claimed for this method that most surgical diseases of the rectum are amenable to radical operative treatment and nothing is sacrificed in the way of thoroughness by selecting this local analgesic procedure instead of the hitherto general anesthesia method. The advantages over general anesthesia are that it is

simple, safe and satisfactory, pain during the operation is unusual and post-operative pain less, time is gained in convalescence by a third and a class of patients is reached that will refuse operative relief rather than take a general anesthetic. Another point worthy of mention in this connection is a class of patients is reached who cannot take a general anesthetic because of debility, senility, etc. The principle of this method is pressure analgesia induced by the distension of the parts in field of operation by sterile hot water, or a very weak solution of some analgetic drug, preferably in hot water. My experience with this method has been most satisfactory in dealing with the internal variety of hemorrhoids. By injecting the base of each tumor until it turns white, they can be painlessly removed by whatever method that suits best the individual case. In more extensive anorectal surgery and with the external variety of hemorrhoids it is necessary to have control of the anorectal field, which is had by inserting needle in median line just posterior to the anus. For external hemorrhoids a few drops of a half to one per cent solution of eucain B or cocain hydrochlorate, should first be deposited just under the skin around the anal margin and after waiting a few minutes for its analgesic effect we can proceed to deposit sufficient hot sterile-water to enable us to excise without pain the external tumors. It is necessary, of course, that we possess accurate knowledge of the nerve supply of the anorectal region in applying this principle to rectal surgery, especially to rather extensive surgical procedures. Before we can successfully block a nerve trunk with any fluid we must first know where it lies. The principal nerve supply to this region comes from inferior hemorrhoidal, which is a branch of the internal pudic, passing across the posterior part of the ischiorectal fossa to supply the external sphincter and the overlying integument. With needle introduced as stated posterior to the anus and by passing it first to one side and then to the other, we can usually block the nerve trunk, enervating these parts. In the management of fistula in ano, except where the fistula is very high and extensive, the same method of local analgesia can be practiced as just outlined for hemorrhoids. In fact, except in the complicated cases, I have practically abandoned the use of general anesthesia in the operative treatment of this condition. The technic in the surgical management of fistula in ano is so well outlined in the text books, and so perfectly understood by you, it seems to me superfluous to dwell on this point. One of the most valuable instruments in my hands is a silver probe, long and slender, slightly enlarged at the tip and so flexible that it cannot be made to make a false passage when

introduced into a tortuous tract for the purpose of finding its internal opening. After determining the existence, or non-existence, as the case may be, of an internal opening, a grooved director is passed on probe into the bowel, and in cases where no internal opening exists the grooved director is thrust through the mucous membrane, or other tissue, and an internal opening made. The operation is finished by laying open the fistulous tract, curetting and packing with gauze, being careful, of course, to search out all sulci which may lead off from the tract and when found subject also to the curette and pack with gauze.

The complicated cases of fistulæ, as well as some of its sequelæ, are purposely omitted from this paper, as time and space forbid their consideration, and should I endeavor to cover all the ground, my paper would become tedious and defeat the one purpose I have had uppermost in mind; that is, to make it practical and appeal to the rank and file of our profession as represented here.

DISCUSSION.

Dr. Thompson, Hot Springs: I heartily approve of Dr. Cox's method of operating. I want to say my experience leads me to affirm that the clamp operation is superior to the other. I am forced to this conclusion after having a singular case the other day. I have never seen anything like it before. The child was two years old. The mother said it had a large pile tumor, that it was greatly distended and very much swollen. It had lost some blood for several days. The room was dark and I could not examine it very well; but it occurred to me that it evidently just had a prolapsed rectum. I said, "Haven't you a clean cloth?" The child was bearing down; so I decided to try to return it. I put my handkerchief under the tumor and it came off in my hand! No hemorrhage, no trouble or inconvenience. I looked at it and found it was a small adenoid. They thought I was a wonderful surgeon to cure piles so easily with nothing but a handkerchief! (Applause.)

Dr. Gibson: A number of years ago I had a case similar to the one just recited by Dr. Thompson. A negro woman brought a child to me that had an external tumor. I diagnosed it hemorrhoids. It was hanging by a small pedicle. I told her the only thing to do was to remove it. When I took hold of it, it came off in my hand. When she asked me how much I charged, I told her I did not feel like charging her anything, because the tumor came off while I held it. At any rate I only charged her fifty cents, and she drew out a twenty dollar gold piece, which I

had to change, and return the balance to her. (Laughter.)

Dr. J. L. Jelks: This is an interesting paper. The first mention was of the injection method, which I have taken occasion to condemn just as strongly as I knew how, with words, just an incriminating as I could possibly find to use. I had a personal reason and a kindly purpose; besides, I believed it was dangerous, I have found that it was so. Since and during that time when I was condemning it, Martin, Pennington and Cook were present to assist in condemning in still stronger terms the injection method, or injection of carbolic acid. At that time I reported a death from gangrene and sloughing. The little pile tumor was still there. It is true, it was forgotten. At the present time I have under my observation and treatment two gentlemen, both with peri-rectal infection. One I operated on seven weeks ago and found seven fistulous tracts from the left lateral quadrant in the median line all the way around to the right anterior quadrant—seven fistulous tracts and structures, and still more piles. That man was operated on for piles by the injection method. Another with peri-rectal infection and with tubercular patches in the region of his rectal infection, a production of the injection method by this same man. Therefore I must add to Dr. Cox's position and assist him in condemning and decrying that method. So far as the clamp and ligature method is concerned, I have used it but have never had satisfactory results. I have never tried the treatment of tumors by enema of hot sterile water before operating. I have been rather suspicious that the hot water would scare my patient so that he would get away! That is one especial feature that we are all likely to overlook, and it is an important point in operating about the rectum. A few days ago a young man was referred to me having a rather extensive peri-rectal abscess in the anterior left lateral quadrant. I opened it under local anesthesia, using one grain of eucain to the ounce of water. A few days later, when the suppuration was under control (he had a left anterior fistula likewise), I blocked off the nerves, dilated the rectum, which was tightly contracted, to the fullest extent with a bi-valvular speculum. Gentlemen, without blocking the nerve, you could not possibly have done that, even under anesthesia, unless it was perfect. We all know that; yet I did that in my office, and operated on the fistula with hardly a grunt from the patient. If the nerves are properly blocked, you may do what you please about the rectum; you will scarcely hurt the patient at all.

Dr. Hatchett: I will ask Dr. Cox, in closing, to bring out more fully his experience and method in blocking off the nerves which supply

the rectum, and his success in divulsion of the sphincter and after blocking it off. Does he do this blocking off with a solution of sterile water?

Dr. Cox: Before I proceed I will answer Dr. Hatchett's query. I covered that in my paper. I said, "Introduce the needle posterior to the anus." Before you insert the needle inject a solution of a few drops of eucain to a dram of water, one per cent, say; finish with sterile water. Use enough water and eucain and you can divulse the sphincter with practically no difficulty and without any pain at all. Pass the needle first from one side to the other. It would be all right to pass it anteriorly if you want to.

Dr. Hatchett: How much water do you use?

Dr. Cox: That depends entirely on the condition. You can use almost any quantity. It is not necessary to use perhaps more than half an ounce; hardly that much. It depends on the individual case, the corpulency of the patient, etc.

STATE BOARD EXAMINATIONS AND MEDICAL EDUCATION.

Besides ascertaining the fitness of the candidates to practice medicine, state board examinations can also furnish a most effective stimulus to the improvement of medical education. A poor medical school would soon be forced to alter its instructions if any considerable proportion of its recent graduates should take low standing in state board examinations. To be effective, however, these examinations must be such as to differentiate sharply between the real, effective, assimilated knowledge, which can be acquired only by first-hand acquaintance with the subjects in clinic and laboratory, and the superficial, ill-understood, pseudo-knowledge procurable by memorizing quiz compends.

It is a notorious fact that a few medical schools are conducted altogether too much on this latter plan. If the examinations are also framed on the quiz-compend model, it follows that graduates of such schools will take equal or perhaps even higher standing than the graduates of schools which insist on thoroughness. This is a statement of fact supported by the small percentage of failures at state board ex-

aminations by graduates of some schools known to be little better than quiz classes. Indeed, one might never have seen the inside of a medical college or hospital, never made a dissection or looked through a microscope, in a word, know nothing worth knowing about medicine, and pass a very creditable compend-examination. Such examinations will demonstrate nothing but the candidate's capacity for cramming; certainly not his fitness to practice medicine. There can be no question that the licensing examination should be framed so as to distinguish between assimilated knowledge and that secured by cramming.

In addition to the usual oral and written examination, there should be a practical portion. Hospitals have long since been combining the practical with the theoretical examination in the selection of internes. In the regular licensing examinations in Europe, practical examinations are required, in addition to oral and written tests. In France practical tests are required in dissection, pathology, operative surgery, regional anatomy and midwifery, while in Germany practical tests are required in medicine, surgery, ophthalmology, pediatrics and nervous diseases, these tests sometimes covering as much as two or three weeks in time. Practical tests are, therefore, not a matter of experiment.

Possibly the division of the licensing examination into two or more parts, thereby allowing of more time to the subjects, would be beneficial. In Great Britain, as is well known, there are four separate examinations and in France five. At least three states, Maryland, Michigan and Indiana, allow their examinations to be taken in two parts, students at the end of their sophomore year being permitted to take examinations in the subjects contained in the first two years of the medical course, leaving the other required branches to be taken after graduation when the applicant comes up for his licensing examination—*Journal American Medical Association*.

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REMITTANCES.

Remittances should be made by check, draft, registered letter, money or express. Currency should not be sent, unless registered. Stamps in amounts under one dollar are acceptable.

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Advertisements should be received by the 8th of the month to insure their insertion in the current issue.

CHANGE OF ADDRESS.

Change of address will be made if the old as well as the new address be given.

CONTRIBUTIONS TYPEWRITTEN.

In order to lessen liability of errors, contributions should be typewritten.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

THIS NUMBER CONTAINS A LIST OF OFFICERS OF THE COMPONENT SOCIETIES OF ARKANSAS, THE ARKANSAS MEDICAL SOCIETY AND THE AMERICAN MEDICAL ASSOCIATION.

Editorials

THE NEED OF DOCTORS IN THE -LEGISLATURE.

If ever it was apparent that doctors—*genuine medical doctors*—were needed in a legislature, the last General Assembly recently in session in this city furnished the occasion and object lesson. Many questions of momentous importance, all introduced or proposed in the interest of public health, received about the same consideration from the “crudites” that a razor-back would give to the abstract motion, “Resolved that all hogs are naturally clean and do not enjoy drinking slop.”

A one-sided warfare is being constantly waged between the altruistic doctor on the one side, and the selfish, egotistic lawyer-politician, aided by the amaurotic, gullible hayseed legislator, on the other. The doctor, observing on his daily rounds the urgent need of laws that will afford protection to the people against preventable disease, dangerous patent nostrums and impure foods; or seeing where improvement could be made in the sanitary conditions in his locality and the State at large—these measures of course all tending to lessen mortality and make for better health—conceives it to be his solemn duty as a guardian of health, to crystalize his views and observations into a bill embodying these essentials and request its passage by the law-making department of the State government. Accordingly, the bill is drawn, and after first receiving the endorsement of the state medical organization, is entrusted to a special committee appointed by the organization to urge its passage.

Unfortunately there has always been a dearth of intelligent, broad-minded and strictly representative doctors in the legislature, and all proposed medical legislation has suffered for this reason. The lawyer-politician is quick to grasp this condition, and once the bill to remedy the evils complained of is introduced, he calls for a conference with the “rural routers” and with but a little expenditure of gray matter, soon convinces the latter that the bill is not in the interest of the masses, as it purports to be, but on the other hand is a deep-laid plan of organized regular doctors to “corner” the practice of

medicine, play profit upon sickness and death, to put out of business the homeopath, eclectic, druggist and the latter's philanthropic ally, the patent-medicine manufacturer. The miner and the sapper begin their work. The day of trial is set, and when the case, "The people vs. Disease, Death and Frauds," is called, a hirsute "son-of-toil," with a safety razor in his inside breast pocket as a prize for loyalty, rises and asks privilege to introduce a car-load of petitions and memorials from his constituents, all protesting vehemently against the passage of the "iniquitous and nefarious measure." (This is a stock expression and is usually memorized by the average member the first week). The introduction of each batch of petitions is followed by a limitation speech, the onus of which is that the proposed bill is class legislation; it will infringe upon the inalienable rights guaranteed by the constitution; it will not prevent the ills complained of, and furthermore, it will drive from the state many manufacturers of patent drugs that have been doing a profitable business in the state for thirty years. His peroration is intensely dramatic when he points to the member who has charge of the bill and demands to know if he can name one person, not a doctor, who demands its passage. There being no reply, the conclusion is evident to his mind that the bill is concocted by the devilish doctors solely in their financial interests.

The arguments of the defense, usually made single-handed by a layman, or a doctor not in close touch with progressive and scientific medicine and unused to argumentative discussion, are of no avail in the presence of such prodigious ignorance and assinnity, and the vote clearly proves untrue the old saying, "the Lord is always on the side of the righteous."

The object of this article is to call attention to the lamentable condition which has prevailed so long in this state, and the crying need of intelligent, medically educated and experienced men of the profession in the legislature. Think what service could be rendered the cause of public health and what honor would come to the profession, if such men as Gibson, of Pulaski; Kirby, of Boone, and Dibrell, of Van Buren,

and Guthrie, of Prescott, and others of like character and ability were members of the General Assembly. With one such man from each Councilor District, the following measures could be enacted into laws in less than thirty days:

1. A law reorganizing the State Board of Health on a sensible basis; enlarging its duties and powers and appropriating ample funds for its purposes.

2. A law amending the present law creating a State Board of Medical Examiners so as to permit only graduates of recognized medical colleges to apply for examination.

3. A law regulating the milk supply of cities of a certain class.

4. A law converting the old State House into a modern charity hospital.

5. A law regulating the sale of patent and proprietary medicines.

6. A law officially recognizing the Medical Department of the University of Arkansas as a branch of the parent University, and making sufficient appropriation therefor.

These are some important measures that should be passed by the next legislature, but unless the Arkansas Medical Society, through its Council, begins now to lay the groundwork by selecting the men to contest for a seat, and rendering financial and other assistance, the same spectacle will confront us next year as that just recently witnessed. These measures cannot be entrusted to laymen, for they can only be defended, explained and amplified by the doctor. It is useless to have the layman commit himself in advance of the election to some proposed medical bill, for the influences to which he is subjected and temptations offered him once he has arrived on the scene of action are so seductive, that it would require a stronger conscience and character than that possessed by the average member of the Arkansas legislature to keep faith with his promises.

While it is no longer true that "in Arkansas every other man is either a politician or a coon-hunter and sometimes both," yet it is true that one election is not over before another begins, and in view of this fact, would it be premature

for the President of the Council to call a meeting of that body some time soon for the purpose of having a free and frank discussion of this whole matter, and outlining a plan which will at least give a fair degree of hope of accomplishing something tangible two years hence?

Dr. J. W. Meek, of Camden; Dr. W. A. Briant, of Hope, Dr. Daniell, Dr. Butler, of Sheridan, and Ruff, of Randolph, have served with distinction and honor in past legislatures, and their experience can be drawn upon for future action.

Department of Surgery

Edited by Anderson Watkins, M. D.,

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VACCINE THERAPY—Bacterial inoculations in localized bacterial infections seemingly hold out considerable promise of success in the treatment of obstinate cases. From Wright of England, Oldmacher and Trudeau of this country and Von Eberts, of Canada, we note interesting results. Von Eberts reports cures in staphylococcic, tubercular, meningococcic and gonococcic cases. His cases are very striking indeed; one fact worthy of note is that in staphylococcic infections the autogenous or "personal" vaccine, i. e., vaccine made of cultures from the patient, is more effectual than "stock" vaccine, whereas in gonococcic and possibly meningococcic inflammations, the "stock" vaccine has yielded good results. The writer has recently begun using gonococcic vaccine, while the indications are encouraging, he feels that he has not used the vaccine enough to warrant any deductions personally. He has been attempting to master the opsonic index technique, but can so far only report two accurate counts in seven cases. The opsonic index is beyond the reach of the practitioner of medicine or surgery; it demands a technique absolutely faultless and

necessitates freedom from interruptions. It is, however, not absolutely necessary in vaccine therapy. Thus Trudeau, who has been using tuberculin with small doses and wide spacing, during its darkest days, states that the opsonic index cannot supplant an accurate clinical study of a case, as an indicator for tuberculin dosage. It is the writer's belief that bacterial vaccines can be safely administered, using the clinical symptomatology without the opsonic index as a guide.

Sir. A. E. Wright in his Harvey lecture warns us that we must not pile increasing doses of vaccine, one upon the other, until we are sure that the early doses are incapable of producing a reaction. This is indeed an important point, and forms the basis of Trudeau's method of tuberculin inoculation.

FOWLER'S INCISION—Fowler's incision has not received the attention it deserves, or so it seems to us. We see the McBurney method not infrequently, but, after using the Fowler method recently, it appears superior to the former. There is greater vision of, and access to, the caecum, by reason of the transverse incision in the posterior sheaths of the rectus muscle. Another advantage is that the fascial incision and sutures are well away from the skin incision. For a description of the method the reader is referred to Fowler's surgery.

END RESULTS IN GASTRIC OPERATIONS—Munro in the June "Annals of Surgery" writes a strong article upon the end results of gastric operations. He points out that in some cases we must not be too sanguine of good results, even if there be actual anatomic ulcers, especially in neurotic patients. He also emphasizes the importance of not meddling with the stomach in the so-called "medical ulcers," i. e., if one cannot find the symptom complex of actual ulcer he should not operate. If one be in doubt and has made an exploratory incision, he should leave the stomach alone if he cannot detect positive signs of an anatomical ulcer. In other words the brilliant results claimed by some in gastric surgery do not always "pan out."

Department of Medicine

Edited by G. M. D. Cantrell, M. D.

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PRACTICAL POINTS IN THE TREATMENT OF FEVER.—Fever is an abnormal condition dependent upon a perversion of a physiologic process—the integrity of which process depends upon the generation and loss of heat being so balanced that a uniform temperature is constantly maintained. The chief cause of fever therefore is a disturbance of the heat-regulating centers by the circulation in the blood of toxic substances.

Of the three types of fever, the intermittent and remittent varieties are the most common in this climate at this season. The intermittent type is more or less prevalent the year round. Fortunately the simple malarial fevers, if attacked early and properly treated can soon be overcome, free purgation and thorough quinization restoring the patient to his former health in a few days. But should they be allowed to go untreated or mistreated, the fever ranges higher each day, until finally a septic fever of a typhoid form is developed, this condition now being due to the engrafting upon the original poison of an auto-infection. These fevers, though not typhoid, do not run as long a course, but should be handled in the same general way.

Typhoid fever presents to us altogether a different undertaking in its management to that of the malarial types, and it is in this fever that the physician should make no error in his diagnosis, for the successful outcome of the case will depend upon making an early and correct diagnosis. A blood test usually clears up the diagnosis. The first step in the treatment is the securing of a healthy, competent and industrious trained nurse, one who is competent to grasp general outlines of the treatment, and energetic enough to carry

out absolutely the directions of the physician. Next is the cleaning of the alimentary canal, and no drugs do this better or quite so well as calomel in one, or divided doses followed by sufficient sulphate of magnesium to flush the canal. This first step having been accomplished, attention should be directed to the control of the fever, and water is the best agent for this purpose. The physician will direct the sponge bath, tub bath or cold packs according to the present condition or indications, but it should never be forgotten that water is the only safe agent in controlling the fever. During the stage of invasion, the temperature cannot be controlled quite so easily with water as later when the fastigium is approached. The following prescription is one that I have used with almost uniformly good results, and so partial am I to it, that I make no change in it unless there are some indications demanding it. It should be given continuously during the course of the fever.

R.

Ammonii salicylatis Grs. 80;
Salol Grs. 80;
Ol. terebinthinæ Gtts. 40;
Tr. cardamoni co. drs. 3;
Mucil. acaciæ oz. 2;
Aq. cinnamomi q. s. ad oz. 4.

M. Sig.—Give one teaspoonful diluted every three hours.

This prescription should be properly compounded to get good results, and the following steps should be observed: First, put the salol and turpentine in the bottle and apply gentle heat by holding over a Bunsen flame until liquifaction has taken place, add the mucilage of acacia and shake vigorously; dissolve the ammonium salicylate in the cinnamon water and add, again shaking, and finally add the aromatics. If these instructions are strictly adhered to in its compounding, there results a reliable mixture that will not disappoint.

The nervous symptoms so often present are relieved by this prescription, and if there is anything in intestinal antiseptics, there could be nothing better to accomplish that purpose. Dia-

phoresis is established and maintained throughout the disease by this combination, and the skin remains soft and in a moist condition. Of course the temperature is naturally lowered, this in turn relieving the nervous symptoms.

The colon should be kept clean, and to accomplish this, I direct a high enema to be given once daily; the small bowels are able to take care of themselves.

Never allow the patient to get out of bed to go to stool or do other little things which many will do if not restrained. Take care of his strength, even into full convalescence.

Solid foods should not be allowed, only liquid foods, and of this latter class, Mulford's Predigested Beef is one of the most reliable. A refreshing and nutritious drink is made as follows, and should be given *ad libitum*: To a glass two-thirds full of crushed ice, add enough water to cover; add the white of a fresh egg, stir with a spoon, then add the juice of an orange or lemon; do not beat this, but merely agitate with the spoon. This is a delightful, refreshing drink, and is always relished by the patient.

Department of Ophthalmology, Otology, Rhinology and Pharyngology

Edited by C. C. Stephenson, M. D.,

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INTRA-OCULAR PAIN—Frequently in the treatment of iritis and also in tubercular keratitis, where atropia is instilled continuously, pain will disappear when this remedy is discontinued. This is due to re-establishment of intra-ocular tension which has been materially increased by the atropia.

ARGYRIA—When using the silver salts in the treatment of ocular troubles, where there is an abrasion of the cornea or ulceration, as in gonorrhoeal oph-

thalmia, it is well to remember the danger of argyria, or a deposit of silver underneath the layers of the cornea. The stain is permanent. The same may be said in reference to the use of plumbi acetatis. A deposit of lead is as unsightly as that of silver. The writer has seen some few cases in which the disfiguration from the deposits of these drugs amounted to almost a deformity.

SHORTENING OF THE LIDS—One of the distressing results following the usual operation for entropion, is 'shortening, producing an unsightly condition, whereby the lids do not approximate and which is usually followed by a xerosis, or dry cornea. For this there is no remedy. Care should be exercised that too much sacrifice of parts be avoided in operating.

HEAT AND COLD LOCALLY—As a general rule hot applications do more good when applied for the deeper involvements of the eye, while cold produce more satisfactory results for the superficial troubles. This rule is subject however to much modification, as frequently the reverse is the case.

ATROPHIC RHINITIS—John North says that permanganate of potash 30 grains to the ounce of water will cure atrophic rhinitis. (See Bishop's Eye, Ear, Nose and Throat). This statement is fallacious, for this remedy will not cure it despite North's assertion. There is no cure so all of the best authorities say. In a wide experience, I have never used a remedy that did more than cleanse and ameliorate.

EARACHE—In the simple earaches of children, the following prescription was used at the New Orleans Eye Ear, Nose and Throat Hospital, during my connection with that institution:

R.

Cocain Mur.....	grs. xx
Atrop sulph.....	gr ii
Morph. sulph.....	gr. iv
Ac. bor. puly.....	gr. x
Ac. carbol.....	gtts. v
Aq. dist.....	dr. iii
Glycerine	dr. i

M. sig.—Drop 4 or 5 drops (warmed) in ear every 15 minutes when suffering, till relieved.

CORYZA—One of the annoying characteristics of an acute rhinitis, coryza and la grippe, is the constant nasal dripping. Atropia in 1-100 gr. doses (by mouth) will stop this and make the patient comfortable. This fact is known to all practitioners, but is so frequently overlooked in the treatment of these cases.

ACUTE LARYNGITIS—An acute laryngitis will yield readily to the following prescription:

R.

Mentholgrs. xv

Liq. petroleum.....oz. ii

M. sig.—Spray larynx 3 times daily.

Talking must be strictly prohibited while voice is hoarse.

NECROSING ETHMOIDITIS—A case of necrosing ethmoiditis came to me recently for treatment, with a fistula opening just above and to the outside of the inner canthus. Nasal fossa completely closed on that side. Granulation size of cherry at site of opening of fistula. Patient anesthetized, posterior tip of superior turbinal body removed, granulation tissue removed from nasal fossa and at opening of fistula curettage of ethmoidal cells, removing all necrosed bone, drainage tube introduced into fistula reaching ethmoid, with irrigations twice daily draining into throat and through nose, has about completed a cure. Patient, boy 11 years old, white.

INTRA-OCULAR HEMORRHAGE—I enucleated an eye a few days ago in which the vision had been destroyed some twenty years ago by an accident, in which a pair of scissors had been stuck into the eye, leaving a cup-shaped cornea, with a large adherent leucoma. This eye troubled at times with fleeting pains, deep injection, and some inflammatory action. A ruptured bloodvessel filled the vitreous chamber, pouring overflow into the aqueous, rendering the tension so great that pain was unbearable. Enucleation was the only method advised for the management of this case, which resulted satisfactorily, and was the means of (I believe) preventing a sympathetic ophthalmia.

THE SAFEGUARDING OF MARRIAGE FROM THE VENEREAL DISEASES

By Egbert H. Grandin, M. D.

Gynecologist to the Columbus Hospital,

New York.

Until the so-called medical secret is relegated to the ashheap of other superstitions, marriage cannot be safeguarded against the venereal diseases. This secret was born to protect the guilty at the expense of the innocent. Therefore, too, it makes of the physician an accomplice. Let us see how it works. Examples fortify facts. A young man, about to enter the state of matrimony, consults me because he has acquired the clap or the pox. I warn him against marriage until cured. I tell him of the dangers to health, to life to which he, in all probability, will otherwise subject his wife. Possibly my interests are the keener because I have reared this girl from birth. He declines my advice. The medical secret bars me from telling the parents or the girl herself. I morally condone a crime. The pure girl, in loving faith, must link her destiny with the impure!

A married man comes to me with the infectious lesion of pox. I warn him conscientiously of the danger he is to his wife and others. He may not heed me. Usually he is too much of a moral coward to tell his wife. Because of the medical secret I cannot. The trusting wife must be inoculated by the "fond" husband!

A few days after birth a child develops ophthalmia and loses its sight. I may tell the father why, but I cannot also tell the mother or the nurse, because the guilty knows that I am hidebound by the medical secret. The sin of the father is visited on the innocent child!

Is it a wonder that many medical men wish to be released from this medical secret, the gist of which the Hippocratic oath states to be "my tongue shall be silent as to the secrets which are confided to me?" Although, thereby to repeat, the physician is made *particeps criminis*, he remains such, or becomes recreant to

one of his highest prerogatives. The laity, until educated as to the venereal diseases, will not make him break this secret. It is too essential, I am ashamed to say, to the exercise of the carnal side of too many men. The physician must be compelled to break this secret by legal enactment. It is mandatory on him to break it with respect to—let us say whooping-cough—a disease not to be counted as a drop to the ocean when weighed in the balance against the ill man, woman, and unborn child are heir to because of the venereal diseases. I need not burden you with statistical data in proof—this I have repeatedly done elsewhere and at other times. It is a good sign that the laity, through the efforts of this and other societies, is beginning to appreciate the weight of such data. As parents learn, as young men and young women learn something definite about the venereal diseases, public opinion will demand that the physician be freed from this antiquated shackle, and the boards of health—whose powers are well-nigh infinite in face of infectious diseases—will make it mandatory on us to report diseases which Morrow has aptly said do not exist “officially.” I have read somewhere the statement that it is impossible for health boards to trace the venereal diseases. The same statement to the same extent held true as regards all other infectious diseases, and in recent years to tuberculosis. The fallacy of the statement is apparent since we know what to-day boards of health are doing in respect to all officially recognized infectious diseases. A beginning must, sooner or later, be made with the venereal diseases; and even though it took a century to reduce their prevalence to a degree, the game is worth the candle for the sake of the innocent. Certainly, no good can come from a policy of inaction.

Were it known that the medical secret had ceased to exist as related to these diseases, unquestionably at once many would be deterred from acquiring them, in any event from propagating them. It may be said that one effect of legislation would be the driving of the subject to the quack or the prescribing drug-

gist. I would remind you that in this city, at any rate, an incessant and vigilant crusade under other laws is being made against these offenders and is driving them to cover. If we can only enter the wedge along the line I advocate, diseases which have thriven for years because of the seal of secrecy will wither under the lime-light of publicity. Not at once, but ultimately, and in the future woman, in particular, will rise up and call him blessed who, armed with the courage born of conviction, drives this radical wedge home from the office of Health Commissioner. It requires courage of the highest type from the man who does this, but in the world's history a just cause has never failed in securing a leader. Not alone must he fight popular opinion, but opposition exerted from the ranks of the medical profession, so deeply engrafted is this medical-secret. But failing other means of mitigating the ravages of the venereal diseases, the Moses will appear perhaps sooner than any of us here expect.

I am told by a veterinarian that in the brute creation the diseased male refrains from contact with his mate. It would thus seem that the highest grade of animals shows the least conscience in matters sexual. And so it is that the views which I hold are minority views, and so I am held as dealing in hyperbole and, may by chance be deemed a mere idealist. But the facts I hold—at the disposal of any one—are so cogent, the evidence I can produce is so free from the latest medical term—“brainstorm”—that could I find a Commissioner of Health with the requisite moral courage and mental equipment, I believe that “a little child” might lead him towards the goal which many men may not hanker for, but which must be reached, and will be reached, in order that the innocent may obtain protection. And so, firm in my belief and true to my convictions, I enter this plea for the safeguarding of the marriage bed, assured that, in time, here as ever truth shall prevail and error shall be conquered.—*The Monthly Cyclopaedia of Practical Medicine*, July, 1907.

DOCTORS HAD TO QUIT.

Traveling Physicians Visiting Paragould Were
Warned Not to Attempt Their Method of
Practicing.

The traveling physicians, claiming to be from the Cleveland Institute of Medicine and Surgery, of Cleveland, Ohio, met with a serious condition of affairs here and had it not been for the leniency of the local medical board some prosecutions would have followed. The first visit of the doctors was announced for yesterday, and Dr. U. F. Fitzgerald, claiming to be one of the leading representatives of the institute, arrived and opened offices at the Stancil hotel yesterday morning, and by nine o'clock afflicted humanity began pouring into their quarters and there were indications of a big business for the strangers till the local medical board put the professional lid on, and then it was all off.

It was ascertained that the physicians were not qualified to practice their profession in the State, consequently the local board proceeded to go after them. A warrant was issued for their arrest, but Dr. Henry Dickson and other physicians of the city not wishing to cause the fellows' embarrassment visited their quarters at the hotel and told them that it was necessary for them to produce the required credentials showing that they were entitled to practice their profession in the State. This the chief doctor couldn't do, and the manner in which he attempted to explain out of the predicament gave rise to a suspicion that he was aware of the fact that he knew he was violating the law. He promised vehemently to shut up shop and get out of town, and did not hesitate to inform the large number of visitors in waiting that he was not prepared to handle their cases on this trip.

Without further ceremony Dr. Fitzgerald began his arrangements to leave the town, and on the first train yesterday afternoon he left for Jonesboro, where they are billed to open offices today, but they will perhaps meet with a sim-

ilar state of affairs there, as the physicians of Jonesboro have been informed of the action taken here.

Dr. H. Freeman, one of the number advertised to appear here, left yesterday morning for Osceola to make arrangements to visit the town of that section, and got out of town before his associates came in contact with the local medical board. He and one of the "company" were billed to join Dr. Fitzgerald at Jonesboro today, and it was evidently their intention to do a big "practice" in that city, but it is quite likely they will go up against a more serious condition of affairs there than that with which they met in Paragould.

These doctors, so one of them told a Soliphone reporter, have been practicing their methods all over the State of Arkansas, and it is their intention to make visits every three months at regularly established points. They came to Paragould from Corning, where they spent one day, and were in Fort Smith about a week ago. They claim this was the first time they had been molested, and that they will meet every requirement of the State law and proceed with their practice, and will come to Paragould again in due course of time. Dr. Fitzgerald, the physician in charge here yesterday said he was in possession of a State certificate or license issued in 1892, while at Hot Springs. But a certificate issued at that date would not hold good till now. He appeared pretty badly scared when the physicians called upon him to produce his credentials yesterday, and seemed glad of the opportunity to quit and get out of the city.
—*Paragould Soliphone.*

Clinical Cases

HIGH TEMPERATURE IN A CASE OF HYSTERIA.

Benton, Arkansas, August 6, 1907.

To the Editor:

It is said that "there is nothing new under the sun," and while hysteria is familiar to all, I feel that the high temperature recorded in the case presented below will prove as interesting to the readers of the JOURNAL as it did to me.

Mrs. W., age 30, married, mother of one child 8 years old; history of two curettements, one and two years previously. Vaginal examination refused.

I was called to see her October 7th, and found her in a convulsive seizure. After proper medication, the convulsions were checked and she had no more during her illness. The temperature taken just after the last convulsion, registered 107. I became alarmed and summoned her husband and told him that in all probability the case would terminate fatally. But to my surprise, she did not die notwithstanding the temperature kept climbing the mercurial ladder until it reached the highest rung my thermometers could register, 114.8, with no serious results to record. I soon began to view the case with more curiosity than seriousness. I used a great number of thermometers, as well as variety of makes, Hick's of course being included amongst them. On a few occasions the thermometers would explode, one-half of the mercury column disappearing and the other half remaining intact. At no time during her sickness did I observe her pulse to go much above normal. Medical treatment availed but little in the reduction of the temperature, ice to the spine and head giving the best results of anything tried. On November 12th she collapsed and remained so for five days and nights, taking no nourishment, not even water. During this stage, a pint of water with 10 drops of tincture of nux vomica was given every four hours per rectum. She came out of the collapsed condition on the 17th and began to convalesce promptly. A letter received in March states that she is well.

Below will be found a correct record of her temperature. I hope that this will not convey the idea that I gave up my practice for this one case. Her husband, a more than ordinarily intelligent man, assisted me in keeping the record.

October 7

10:15 p. m. 107
11:35 p. m. 102%
October 8
4:00 a. m. 95
6:30 a. m. 96
7:30 a. m. 97

October 15

8:15 a. m. 103
9:30 a. m. 112
11:00 a. m. 113
1:00 p. m. 103%
1:40 p. m. 113
4:00 p. m. 113

10:00 a. m. 98
11:50 a. m. 104
2:00 p. m. 113
2:30 p. m. 104%
3:00 p. m. 111
3:20 p. m. 110
3:35 p. m. 112
4:00 p. m. 102%
4:35 p. m. 111
5:20 p. m. 107
6:15 p. m. 111
7:00 p. m. 111
7:35 p. m. 104
8:05 p. m. 110%
9:05 p. m. 112
10:05 p. m. 111%
11:05 p. m. 111
October 9
1:45 a. m. 96%
3:30 a. m. 98
5:40 a. m. 97
6:45 a. m. 97%
8:15 a. m. 98%
9:35 a. m. 99%
10:25 a. m. 112
11:00 a. m. 104%
11:40 a. m. 100%
12:25 p. m. 100
1:05 p. m. 97
1:20 p. m. 99
1:45 p. m. 105%
2:05 p. m. 102%
2:25 p. m. 101
3:25 p. m. 101
4:05 p. m. 113
4:25 p. m. 113
4:45 p. m. 108
5:10 p. m. 101%
5:35 p. m. 107%
6:25 p. m. 110
6:50 p. m. 109%
7:10 p. m. 106
7:35 p. m. 101%
7:55 p. m. 107%
8:20 p. m. 103%
8:45 p. m. 99%
9:10 p. m. 107
9:40 p. m. 101%
10:00 p. m. 103
10:40 p. m. 101%
11:30 p. m. 97%
October 10
2:15 a. m. 97%
3:25 a. m. 112
5:55 a. m. 97%
7:35 a. m. 100%
8:15 a. m. 108%
9:10 a. m. 106%
9:35 a. m. 102%
10:00 a. m. 98
10:40 a. m. 98%
11:15 a. m. 113
11:50 a. m. 106
12:30 p. m. 113
1:00 p. m. 111%
2:00 p. m. 103%
2:30 p. m. 113
3:00 p. m. 113
3:35 p. m. 111%
4:10 p. m. 103%
4:45 p. m. 110
5:45 p. m. 112
6:20 p. m. 100%
7:10 p. m. 100%
6:00 p. m. 112
7:00 p. m. 102
9:45 p. m. 98%
October 16
7:15 a. m. 112
8:30 a. m. 112
10:00 a. m. 104
11:30 a. m. 109%
1:20 p. m. 98%
2:20 p. m. 108
3:20 p. m. 107
4:30 p. m. 112
6:00 p. m. 110%
7:00 p. m. 109%
8:00 p. m. 113
9:30 p. m. 112
October 17
7:30 a. m. 103%
9:30 a. m. 112
11:15 a. m. 113
1:00 p. m. 113
2:30 p. m. 113
4:00 p. m. 113
6:00 p. m. 113
7:00 p. m. 113
9:15 p. m. 113
October 18
8:30 a. m. 113
9:00 a. m. 113
9:30 p. m. 113
10:15 a. m. 113
11:15 a. m. 113
1:00 p. m. 113
2:00 p. m. 113
3:00 p. m. 113
4:00 p. m. 113
5:00 p. m. 113
6:30 p. m. 113
7:30 p. m. 106%
8:30 p. m. 99
October 19
7:30 a. m. 108%
8:30 a. m. 113
9:30 a. m. 113
11:00 a. m. 113
12:15 p. m. 112
1:00 p. m. 113
2:00 p. m. 113
3:00 p. m. 113
4:00 p. m. 113
5:00 p. m. 113
6:30 p. m. 113
9:15 p. m. 111%
October 20
7:45 a. m. 113
9:15 a. m. 113
10:15 a. m. 113
October 21
7:45 a. m. 107%
8:35 a. m. 94%
8:55 a. m. 108%
10:00 a. m. 109%
11:30 a. m. 111
1:00 p. m. 111
2:00 p. m. 111
3:00 p. m. 111
4:00 p. m. 111
5:00 p. m. 111
6:00 p. m. 111
7:00 p. m. 111
8:00 p. m. 103%
October 22
7:30 a. m. 108%

8:00 p. m.102	8:30 a. m.111	7:30 a. m. 94½	3:15 p. m.107
9:00 p. m.100%	9:30 a. m.111	8:45 a. m.114	November 4
9:45 p. m.104%	7:45 p. m.114	10:15 a. m.114	1:15 p. m.109%
October 11	9:00 p. m.114	11:45 a. m.114	2:00 p. m.109
6:45 a. m.113	10:00 p. m.114	1:30 p. m.114	7:00 p. m.114
7:15 a. m.106%	October 23	3:00 p. m.114	November 5
7:45 a. m.105%	7:15 a. m.114	4:30 p. m.111	9:15 a. m. 97%
8:50 a. m.102%	8:30 a. m.110	6:00 p. m.114	4:30 p. m.114
9:30 a. m.101½	9:00 a. m.114	7:00 p. m.112%	6:30 p. m.112
10:00 a. m.103	10:45 a. m.113	8:15 p. m.112	November 6
10:45 a. m.107	11:45 a. m.114	October 29	10:15 a. m.107%
11:20 a. m.112	1:00 p. m.114	7:15 a. m. 95	3:30 p. m.114
12:00 m.112	2:00 p. m.114	8:30 a. m.108%	5:00 p. m.112½
12:50 p. m.113	3:00 p. m.114	9:30 a. m.114	November 7
2:25 p. m.112	4:00 p. m.114	October 30	11:00 a. m.110%
3:15 p. m.112	5:15 p. m.114	9:00 a. m.102%	1:30 p. m. 97%
4:00 p. m.112	6:00 p. m.114	10:00 a. m.108%	November 8
5:00 p. m.112	7:30 p. m.114	12:00 m. 98%	9:00 a. m.112½
6:15 p. m.108%	8:30 p. m.114	2:30 p. m. 98%	10:30 a. m. 98
7:15 p. m.112	10:00 p. m.111%	8:30 p. m. 98%	3:00 p. m.103%
8:00 p. m.104½	12:00 p. m.114	October 31	7:00 p. m.114
9:00 p. m.106%	October 24	8:30 a. m. 97%	November 10
10:00 p. m.100%	2:00 a. m.114	10:15 a. m.110%	10:30 a. m.109½
10:30 p. m. 98%	4:00 a. m.114	11:15 a. m. 97½	3:15 p. m.110%
October 12	6:30 a. m.114	12:45 p. m. 95½	8:00 p. m.114
7:30 a. m. 97%	7:30 a. m.114	2:00 p. m.110%	November 11
8:30 a. m.112	9:00 a. m.114	7:45 p. m.114	10:00 a. m.110
9:00 a. m.112	10:00 a. m.114	November 1	7:00 p. m.114
10:00 a. m.112	11:00 a. m.114	9:00 a. m.108%	November 12
11:00 a. m.104½	12:00 m.114	1:00 p. m.114	10:00 a. m.114
12:00 m.102½	1:30 p. m.114	2:30 p. m. 98½	7:00 p. m.114
12:30 p. m.105%	2:30 p. m.114	4:00 p. m.114	November 13
1:00 p. m.106%	4:00 p. m.114	8:45 p. m. 95%	10:00 a. m. 98%
1:45 p. m.110	5:10 p. m. 96½	November 2	7:00 p. m. 98%
2:05 p. m.111	5:20 p. m.110½	8:00 a. m.107%	November 14
2:30 p. m.104	5:23 p. m.114	9:40 a. m.114	10:00 a. m. 98%
3:10 p. m.100	6:00 p. m.114	11:00 a. m.111%	8:00 p. m. 98½
3:40 p. m.105	7:00 p. m.114	2:35 p. m.103%	
4:15 p. m. 99	8:30 p. m.114		
4:50 p. m.106½	9:30 p. m.114		
5:40 p. m.110½	October 25		
7:20 p. m.101	7:30 a. m.114		
8:45 p. m.113	8:00 a. m. 96		
9:20 p. m. 98	9:00 a. m.114		
10:30 p. m.113	11:30 a. m.114		
11:15 p. m.102	12:30 p. m.114		
October 13	1:30 p. m.114		
8:35 a. m.107	2:30 p. m.114		
9:15 a. m.111	3:30 p. m.114		
10:30 a. m.109	4:30 p. m.114		
11:30 a. m.103	5:30 p. m.114		
12:00 m.113	9:15 p. m.111		
12:50 p. m.105%	October 26		
2:15 p. m.113	7:30 a. m. 95½		
2:45 p. m.113	9:00 a. m.111		
5:00 p. m.103%	11:00 a. m.111		
6:00 p. m.113	4:30 p. m.114		
7:35 p. m.101%	5:45 p. m.114		
October 14	7:00 p. m.114		
8:00 a. m.110	8:00 p. m.114		
9:00 a. m.111%	9:30 p. m.114		
10:15 a. m.111%	October 27		
11:15 a. m. 98	8:30 a. m.108%		
12:20 p. m.106½	11:00 a. m.114		
2:00 p. m.105%	12:00 m.114		
3:30 p. m.113	1:00 p. m.114		
4:30 p. m.107½	2:00 p. m.114		
6:00 p. m.112	3:00 p. m.114		
7:00 p. m.109%	4:00 p. m.114		
8:15 p. m.112	5:00 p. m.114		
9:00 p. m.102%	6:00 p. m.114		
7:15 p. m.114	November 3		
8:30 p. m.114	7:30 a. m. 96%		
October 28	10:15 a. m.109		

Dewell Gann, Sr., M. D.

PROGRAM OF THE EIGHTH DISTRICT MEDICAL SOCIETY

"Yellow Fever," D. R. B. Greenlee, M. D.,
Mayflower.

"Gastric Uleer in Typhoid Fever," J. F.
Brown, M. D., Conway.

"Epilepsy from a Medico-Legal Stand-
point," Keating Bauduy, M. D., Little Rock.

"The Benefits to be Derived from Medical
Organization as Understood by the County Sec-
retary," C. C. Stephenson, M. D., Little Rock.

"Peritonitis and Its Treatment," J. P. Run-
yan, M. D., Little Rock.

"Report of a Case of Double Pneumonia with
Unusual Complications and Sequelæ," Norman
H. Jackson, M. D., Pontoon.

"Acute Gastro-Enteric Intoxication," A. H.
McKenzie, M. D., Dardanelle.

"Repair of Perineum and Cervix Following
Labor," W. C. Dunaway, M. D., Little Rock.

Communications

A FRENZIED MEDICAL COLLEGE.

Docter Morgen Smith,

dear editer:

I am thinking of tending som medercal School this Fall and wood like to now what you think of the Gate city medercal collige and school of Farmercy. Also if you think the prefesser of the collige is qualerfide to make me pas a state Bourd if I tend but won Seshion. all so as i am low on fynancies I wood like to now if you think i cood dispows of my shair of stock the perfesser says he wood give me if i tend a seshion of his medercal and school of Farmercy for the cash. A Medercal Stewdent who you now give me this advitismint and said to writ to you as you wood now how to advize me, if I doan't tend his collige i sertinly wood like to tend som other good school which will make me pas a state Bourd nex sommer so i can practis medersin. allso i have a farely good english Education and have taut school some in the passed. I have studded allso Physyolergy som but not mutch to bragg on.

Rooral rout num. —

pass. the Medercal Stewdent allso askd me to ask you if docter Decker was in good reoput in yore Medercal sosiety.

For the information of the JOURNAL readers, the "Sure Proposition" is published *verbatim et literatim*. Perhaps our Texas brethren may also find it interesting reading.

\$25,000.00

1,000 Shares

FREE TO PHYSICANS—GATE CITY
MEDICAL COLLEGE AND SCHOOL
OF PHARMACY.

This school has recently been incorporated with a capital stock of \$50,000. The dean has \$25,000 of this stock which he proposes to give to Physicians and Medical Students on one of the following plans:

FIRST.

Each student who attends the Gate City Medical College and School of Pharmacy during the next session will get absolutely free of

charge, one share of the Capital Stock of this college.

SECOND.

Send us the names and addresses of prospective Medical Students. We will send them our circulars and announcements and when as many as three from the list you send us enter our college, you will get one Share of Stock.

THIRD.

We will give you a course of Home Reading (Mail Course) in Medicine for \$25. We issue you one share of the stock as soon as you begin the course, and when you finish it we issue you a special diploma on your work. Both graduates and those who have not graduated may take this work and get the diploma. It requires from four to six months to finish a Mail Course. If you are interested in this course write for further particulars.

STOCK.

This stock is fully paid and non-assessable. It will never cost you a cent. On the other hand a share will entitle you to vote in all meetings of the stockholders of the college, and will also entitle you to share in all dividends.

The object in giving away this enormous amount of stock is simply to get One Thousand Progressive Physicians interested in our college. This will make it one of the most popular Medical Colleges in the South and we will be amply paid for our liberal gift.

Address all communications to

J. W. DECKER, Ph D., M. D., Dean,
Texarkana, Texas.

Before attempting to give the information desired, the editor wishes to inform you as well as all others who in the future might wish to write for this Journal, that one of the inflexible rules of this office is that anonymous communications are invariably thrown into the waste basket, unopened, and it matters not how important or interesting their contents may be to the public, "under the rules" they must suffer the common fate decreed for them by a self-respecting and high-toned journalism. At

long intervals and in some instances a departure may be taken from this practice, and as the interval is already long and the instance exceptional, it is left with our readers to condemn or excuse this, the first infraction of the established law, in a desire to give the "Prospective Medical Student" valuable information.

Know you then "Prospective Medical Student" that at the Jonesboro meeting of the Arkansas Medical Society, information reached the Council that Dr. J. W. Decker, a member in good standing of the Miller County Medical Society, was conducting a medical college at Texarkana in a manner not calculated to inspire the confidence of the profession. In short, it was charged by some one that his school was nothing but a "Diploma Mill." Decker was summonsed to appear before the Council, and when confronted with the reports, denied the allegations and invited the Council to send a Committee of Investigation to Texarkana where he would take pleasure in proving to the Society the falsity of the charges. Accordingly, Dr. J. S. Corn, of Nashville, and the writer, were appointed to visit the college, instructed to make a thorough examination and report to the Society at the next annual meeting. The results of the investigation are embodied in the following report which was unanimously adopted by the Society in annual session at Texarkana, 1904:

REPORT.

A.—In 1898 the Medical Department of Sulphur Rock College, Dr. J. W. Decker, Dean, was organized at Sulphur Rock, Ark., at which place it was conducted as a preparatory school of medicine until June, 1902. In 1900 Dr. Decker applied for and received a charter from the State of Arkansas, in virtue of which legal authority was conferred upon his school. The almost total lack of any educational requirement for admission; the professed ability to prepare students to successfully pass medical examining boards upon one or two terms attendance, and the claim of recognition by other colleges of the certificates of attendance issued by him, constituted a MAGNETIC

TRINITY that did not fail to attract many students from Arkansas, Texas and Indian Territory to this shrine of medical learning. In the language of the catalogue, "Any one who can understand FAIRLY WELL (capitals ours) what he reads can study medicine profitably." "Any person of average ability * * * can prepare himself to pass for license in one or two terms." The length of a term is not stated in the catalogue, but by dividing a course or session into three terms of two months each, it will readily be seen with what lightning-like rapidity the rough material could be fashioned into the finished product.

Success crowned the doctor's efforts (in this preparatory work) so bountifully that he *decided* to move the school to Texarkana and make it a REGULAR GRADUATING (capital ours) school. In June, 1902, Dr. Decker moved all the *medical library, laboratory, supplies and appliances, pharmaceutical fixtures scientific apparatus*, and in fact *everything* belonging to the medical department to Texarkana, Ark. (See Catalogue 1902-1903, page 5.) As a result of the doctor's *decision*, the Medical Department of Sulphur Rock College was absorbed during the metamorphosis, and the Gate City Medical College and School of Pharmacy (the *imago*). J. W. Decker, Ph. D., M. D., Ph. G., Dean, was formally opened for the admission of students on January 1, 1903. at Texarkana, Arkansas.

B.—The college buildings, with all appurtenances thereunto belonging, are situated on the Arkansas side of State street.

C.—On May 11, 1903, Dr. Decker obtained a charter from the State of Texas which authorized him to organize and conduct the Gate City Medical College and School of Pharmacy, at Texarkana, Texas. Four days subsequent to the obtaining of this charter, thirty students, who had completed the required course at the Gate City Medical College and School of Pharmacy, at *Texarkana, Arkansas*, were graduated and received diplomas from the Gate City Medical College and School of Pharmacy, located at *Texarkana, Texas*, the diplomas issuing from Dr. Hunt's office.

D.—There were one hundred and twenty-three students in attendance upon the session just closed, thirty graduating and receiving diplomas.

E.—The fees charged are:

Matriculation	\$ 5 00
Professors' tickets	50 00
Laboratory	10 00
Graduation	25 00

Making a total of\$ 90 00

F.—So strikingly poor and inadequate are the facilities for teaching *modern medicine* in this school as observed upon making a thorough personal inspection, that one is almost constrained to the belief that either the dean is unfamiliar with, and a perfect stranger to, the highest and accepted standards of medical education and teaching, or else the representations made in the annual catalogue, in which are emphasized the many advantages offered the student who would prosecute the study of medicine in this school, were penned with a conscious and deliberate carelessness that should not be permitted to pass without receiving the severest condemnation by those of the profession who welcome the high standard of requirement of admission to our best colleges, as well as demanding the greatest possible efficiency in their graduates.

G.—Anatomy has ever been considered the corner stone of the fabric of medicine, and the anatomical laboratory the centre, about which every other branch revolves. It would be as absurd to think of an army without a general as a medical college without a cadaver within its walls: yet the Gate City Medical College and School of Pharmacy is absolutely without an anatomical laboratory where students may pursue the most important single study in the medical curriculum. Dissection was not required of the students for obvious and sufficient reasons.

H.—Personal attendance upon the lectures has not been required of those who found it inconvenient to attend the first course, and a

mail or correspondence course was given, for which due credit was allowed and *advanced standing* permitted.

I.—To instruct those who desire it in the noble and honorable art of healing, for which a fee commensurate with the services rendered is exacted, is certainly a commendable and praiseworthy profession, though indeed a most responsible one. But a medical college, organized and launched in the midst of an era of the greatest medical energy and progress the world has ever known, (a) that has practically no educational requirement for admission; (b) that is without an anatomical laboratory; (c) that does not require its students to dissect; (d) that makes false representations in its catalogues, thereby attracting many students; (e) that is without sufficient hospital advantages, thus depriving students of the best means of studying diseases clinically; (f) that gives lectures by mail for which credit is given; (g) that is conducted *dually, brazenly, irregularly and unprofessionally*, in a *Dr. Jekyll-and-Mr. Hyde manner*, should meet its just reward at the hands of the courts.

The "stigmata" of fraud were so much in evidence as to warrant the conviction, that not only is Dr. Decker guilty of unprofessional conduct, meriting the unqualified condemnation of the profession, but the charter under which he is authorized to conduct his school should be summarily revoked by the Arkansas and Texas authorities, thereby putting an end to a brief but disgraceful chapter in the history of an Arkansas-Texas medical college.

It is recommended that the Miller County Medical Society immediately proceed to investigate this matter with instruction to report the result of said investigation to the Council.

J. S. CORN, M. D.,

Councillor Sixth District.

MORGAN SMITH, M. D.,

Councillor Fifth District.

The Council after hearing the report, ordered the Miller County Medical Society to put Decker on trial for gross, unprofessional conduct. After a fair trial at which Decker appeared in his own defense and the writer represented the prosecution, he was expelled in disgrace, and so far as known, is today unaffiliated with any medical society, and is as the union man would say, "a scab doctor."

The report above published answers all of your questions but the one concerning the cash value of the stock. We confess unfamiliarity with the cash value of the stock of the college, and would suggest that you write to the U. S. District Attorney, Texarkana, asking for this information. If it has a cash value he would be very likely to know it, and if it has not, we believe he would be glad to investigate the matter for you. You might also write to the Post Office Department, Washington, D. C., enclosing one of the circulars sent with your letters to us.

In view of your literary qualifications, our sincere advice to you is that if you are determined to attend "som school that will make you pass (up) a state Bourd next somer," we know of none more willing to take your money, nor less able to give you anything for it than the Gate City Medical College and School of Pharmacy. You will find the surroundings to your liking, and intellectually, you will feel perfectly at home in a few hours after your arrival. This mental tranquility should be worth something to you. We think you should not accept the "shair of stock" the Professor offers you. This would convince him that you are not small but appreciative of a good thing and a "sure proposition."

Before you buy your ticket for Texarkana, write the Texas authorities for the new address. This might save you some extra expense.

News Items.

Dr. Frank Vinsonhaler is in the Adirondacks for the Summer.

Dr. J. E. Sparks, of Crossett, has returned from the Mayo Surgical Clinic where he has been in attendance for three weeks.

Dr. Jas. H. Lenow, Dean of the University of Arkansas, Medical Department, is spending his vacation in Colorado.

Dr. J. J. Johnson, of Harrison, is at the Post-Graduate School of Boston, and will visit the Jamestown Exposition before returning.

Dr. A. R. Stover, recently elected to the chair of Chemistry in the University of Arkansas, Medical Department, has returned from Johns Hopkins and other eastern hospitals.

Dr. A. E. Harris, Lecturer on Physical Diagnosis and Clinical Medicine in the University of Arkansas, Medical Department, spent his vacation in the laboratory of Cabot, Boston.

The Secretary acknowledges pleasant calls from the genial Dr. M. G. Thompson, of Hot Springs, and Dr. G. S. Brown, a member of the State Board of Medical Examiners of the Arkansas Medical Society, of Conway.

Dr. G. M. D. Cantrell, Professor of Theory and Practise of Medicine, College Physicians and Surgeons, left on the 11th for the Summer resorts of Maine. He will spend the greater part of his vacation at Bar Harbor.

Dr. J. S. Westerfield, of Conway, was in the city on the 11th in the interest of the Eighth District Medical Society, of which he is the president. He says that the meeting at Dardanelle, on the 26th and 27th inst., promises to be a big success, and from the number of papers promised and the arrangements made for entertaining the Society by the Yell County Medical Society, leave no doubt of this.

GENERAL.

The Broughton Sanitarium, of Rockford, Ill., conducted by Dr. Broughton for the treatment of Drug Addictions and Special Nervous Cases,

is being enlarged by the addition of thirty new rooms. This bespeaks prosperity for the Sanitarium to which it is justly entitled.

The Medical Association of the Southwest, comprising the states of Missouri, Kansas, Oklahoma, Indian Territory, Arkansas and Texas, will hold its next annual meeting at Hot Springs, Ark., in October. This Association, organized less than one year ago and recently officially recognized by the American Medical Association, has a membership of several hundred members already, and it is safe to predict that it will have a thousand in another year. The program for the Hot Springs meeting is not yet completed, and the Secretary, Dr. F. H. Clark, El Reno, Oklahoma, promises it for the September number.

Change of Addresses

H. H. Niehuss, M. D., from Wesson, to Mt. Nebo.

Jas. H. Lenow, M. D., Little Rock, to Colorado Springs.

J. W. Powell, M. D., from Russellville, to Springfield.

Deaths

J. C. Robinson, M. D., University of Louisville, Medical Department, 1891, a member of the Lee County Medical Society, died at his residence in Marianna, July 19th, at the age of thirty-nine years.

A PROFESSIONAL HINT.

"Birds in their little nests agree:

And 'tis a shameful sight,

When children of one family

Fall out, and chide, and fight."

District and County Societies

THE FAULKNER COUNTY MEDICAL SOCIETY has adjourned for the Summer, and will resume its meetings early in the Fall.

THE FAULKNER COUNTY MEDICAL SOCIETY reports the addition of two new members, Dr. Geo. L. Henderson, Greenbrier, and Dr. Jos. H. Downs, Vilonia.

THE SEVIER COUNTY MEDICAL SOCIETY met at Lockesburg, July 23rd, in regular monthly session. The attendance was small. Program for next meeting will include a list of ten questions to be submitted for discussion.

THE SEVIER COUNTY MEDICAL SOCIETY met at Lockesburg on the 23rd July. On account of the extremely hot weather the attendance was small, but considerable interest was manifested by those who participated in the proceedings. An interrogatory program was adopted for the next meeting which promises to create live interest.

THE FRANKLIN COUNTY MEDICAL SOCIETY held its regular monthly meeting at Ozark on the 6th, with only three members present and a visitor from the Crawford County Society, Dr. Campbell. The list of questions compiled by Dr. Rambo and the Secretary, were discussed with much interest and profit.

Dr. H. H. Turner is in the mountains for his health.

THE QUARTERLY MEETING OF THE EIGHTH DISTRICT MEDICAL SOCIETY, embracing the societies of Conway, Faulkner, Pope, Perry, Pulaski, Johnson and Yell countieese, will be held at Dardanelle on the 26th and 27th of August, convening at 2 o'clock, p. m. This will be the first meeting of this society since April, 1906, and the President, J. S. Westerfield, of Conway, and Dr. S. P. Vaughtner, the Secretary, are making strenuous efforts to make the meeting a great success.

Department of Therapeutics

Edited by Milton Vaughn, M. D.

Professor of Materia Medica and Therapeutics
University of Arkansas, Medical
Department

AMEBIC DYSENTERY—In this disease bismuth salts and all powders are contra-indicated. Give quinine sulphate solution by high injections, care being taken to reach the cecum and ascending colon. Begin the quinine solution at 1:5000, gradually increasing to 1:2500, and later to 1:1000. The solution should be warm and from one to two quarts used at each injection. The patient's hips should be elevated and great pains taken to cause every possible part of the colon to be reached by the solution. It should be retained for at least fifteen minutes.

This treatment is habitually employed in the British and American Medical Service in tropical and sub-tropical countries, and has also been adopted at Johns Hopkins. Some of the best British authorities use acetozone by mouth and enema.

ITCH—The various forms of itch may be treated successfully with Vleminckx's Solution of sulphate of calcium, the formula for which is as follows:

Quick lime.....oz. i
Precipitated sulphur.....oz. ii
Aqua.....oz. xv

Mix and boil in an earthenware vessel till the solution is reduced to 10 ounces; after subsidence, decant the clear liquid, which should be used on cloth, lint or gauze every night for four or five nights.

CHIGGOE, CHIGGER.—The chigger should be removed by the use of a clean needle after which chloroform should be applied. By removing the chigger entirely, which may be done with a small sharp bistoury or even a needle, often inflammation is prevented and consequent pus formation. If chloroform is not available, mercurial ointment is the next best remedy.

POISONING FROM IVY OAK AND OTHER PLANTS—Use acetate of lead solution and opium according to the following formula:

Tr. opii1 part
Liq. plumbi subacetatis4 parts
Aquae16 parts

Even better than this is equal parts of aromatic spirits of ammonia and water. This dissolves and carries away the stick, non-volatile oil of the rhus toxicodendron, and prevents further spread of the poison. Use *no* ointments in the dermatics of vegetable poisoning.

THE MUTUAL LIFE INSURANCE COMPANY OF NEW YORK.

The Mutual Life Insurance Company, one of the last of the three big old-line insurance companies to reduce the fee for medical examinations is now the first to reinstate the old schedule of fees, and the following circular letter from the Medical Director is self-explanatory. The prophecy is made that it will not be but a short time until all legitimate, reputable and reliable companies will adopt a uniform fee of \$5.00 for each completed examination.

CIRCULAR NO. 88.

New York, July 23, 1907.

I am glad to announce to the Medical Examiners of the Company that on and after August 1st, 1907, the Company will pay a fee of \$5 for each completed examination for new insurance, irrespective of the amount of insurance applied for.

This has been rendered possible by rigid economy in other directions whereby a saving in the expense of obtaining new business has been effected of sufficient size to warrant this step.

All extra allowances for mileage, obtaining additional information, urine, etc., will be abolished beginning August 1st. The fee for a microscopical examination of the urine will be \$5 as heretofore, but this will only be made when directly called for by the Company.

The fee for a Certificate of Health for the restoration of a lapsed policy will be \$2, unless a full examination is called for, in which case it will be \$5.

Very truly yours,

Brandeth Symonds, M. D.,
Medical Director.

THE THIRD SEMI-ANNUAL MEETING
OF THE EIGHTH DISTRICT
MEDICAL SOCIETY

The next meeting of this Society, comprising the Societies of Conway, Faulkner, Johnson, Pope, Perry, Pulaski and Yell counties, with a total of 155 members, will be held at Dardanelle, on the 26th and 27th of August. The Yell County Society as host, has left nothing undone to make the meeting a success from every standpoint. The president, Dr. Westfield, and Dr. Vaughtner, the secretary, of the District Society, have been untiring in their efforts to secure a good program, and several papers not published in the program appearing elsewhere in this issue, have been promised. Dr. C. C. Stephenson, president of the State Society, will read a very interesting and valuable paper on "Some Views Concerning Medical Organization as Entertained by an Ex-Secretary."

The suggestion has been made that after the members arrive at Dardanelle, adjournment be taken to Mt. Nebo, the great health resort of the Ozarks, and the sessions be held there. As it is only a few miles distant, this could be done without much loss of time and the busy doctors who have been sweltering under the vertical rays of Uncle Sol for the last two months, would gladly welcome the refreshing breezes of the mountains for a few days.

The train will leave Little Rock at 8:25 a. m., arrive at Russellville at 11:40, and arrive at Dardanelle at 12:40. Returning, leave Dardanelle at 4 o'clock p. m., arrive at Russellville at 4:30; leave Russellville at 4:51 and arrive at Little Rock at 8 o'clock.

CHANGE IN THE FACULTY OF THE
COLLEGE OF PHYSICIANS
AND SURGEONS.

Dr. W. P. Illing, one of the organizers and largest stockholders of the College of Physicians and Surgeons, has tendered his resignation as Secretary of the Faculty, and Dr. W. A. Snodgrass, has been elected to fill the vacancy.

MEDICAL EDUCATION IN THE UNITED
STATES.

WITH SOME FACTS OF THE EXISTING CONDITIONS AND NEEDS AS SHOWN IN THE REPORT OF THE COUNCIL ON EDUCATION MADE TO THE AMERICAN MEDICAL ASSOCIATION AT ATLANTIC CITY, JUNE 4-7, 1907.

During the last twenty-five years medicine has made wonderful progress. During this period it has earned for itself the right to be called a science.

The science of medicine is one of the broadest sciences. It is based on the sciences of anatomy and physiology, physics and chemistry, pathology and bacteriology and pharmacology. For centuries medicine was a mass of empirical facts which acknowledged no limitations and the acceptance of which required a robust faith on the part of both doctor and patient. To-day medicine is a science; it knows its power, it recognizes its limitations and has learned to acknowledge without fear those things which it does not know, and when it makes such acknowledgement it turns the fire and zeal of well-trained minds on these unsolved problems, with the hope and determination of finding their solution.

The benefits conferred on mankind by medical discoveries have already been enormous.

The recognition of the germ cause and resulting control by quarantine of great plagues like cholera, yellow fever and pest, the virtual eradication of smallpox by vaccination, the cure of diphtheria by antitoxin, the relief from pain secured by anesthetics, the prevention of surgical infections by Lister's great discovery, antiseptic surgery, which has made possible the many life-saving operations of modern surgery, the reduction of typhoid fever by a pure water supply—all these have added greatly to the wealth and health of communities and to the happiness and comfort of the individual.

The civilized world can well afford to acknowledge the importance of the accomplishments of modern medicine and to extend to medicine every encouragement and assistance in solving the many problems still in sight.

The cancer problem, tuberculosis—"the great white plague"—pneumonia—the captain of the men of death—scarlet fever, with its undiminished mortality; all these and many more must be conquered and controlled. And in this fight the community must furnish the laboratories and hospitals necessary and train the men who are needed to carry on this struggle of science against disease.

In our own country medicine has so far received little assistance from the state, and, compared with schools of liberal arts and theology, it has received almost no endowments from individuals. And yet no state and no philanthropist can find a better investment than the hospital and laboratories of a modern medical school; none from which the immediate returns are so large, none from which the possibilities of enormous profits to humanity are so great.

Modern medicine requires a better order of intellect and better training than it did twenty-five years ago and better than that possessed by the average student entering its ranks to-day in this country.

The standards of medical education in the United States are very uneven, representing the highest and the lowest types as compared with such powers as England, France and Germany. As a whole, the standard in this country is distinctly lower than in these countries and lower than it should be to meet the requirements of medical science in the present stage of development.

In this country the control of medical education and licensure is vested in the individual states and not in the national government. This has probably been for the best because of the enormous size of our country and the widely varying conditions met in the different sections.

In this country, until comparatively recently, medical education has been in the hands of private medical colleges, conducted by groups of medical men largely for their own interests. In Germany and France the medical school has been developed as a department of the univer-

sity, and, fortunately in this country the same plan is being gradually adopted. It must be said to the credit of American medical schools and American medical men that, handicapped as they have been, without state aid or private endowment and dependent practically entirely on the fees of students, they have accomplished much of which we may justly be proud.

BRITISH MEDICAL EDUCATION.

In England medical education is in control of the national government through the agency of the Medical Council. The Medical Council determines the standard of preliminary education, the character of the curriculum, the length of the course and the character of the examinations for licensure.

The preliminary education required is about equal to our best four-year high schools and this is followed by a five years' course in medicine, the first year devoted largely to physics, chemistry and biology, and this year can be taken either in the medical school or in a school of liberal arts recognized by the council. Then follow the four years of medicine, given largely as they are in this country, the last year, however, can be taken as a clinical year in a recognized hospital. The examination for licensure can then be taken at the end of this five-year course or it can be taken in two parts, one after the completion of the laboratory years and the second on the completion of the course. As a matter of fact, however, these examinations are so rigid, that the average time required by the student to prepare for them is about six years.

MEDICAL EDUCATION IN GERMANY.

In Germany the student can enter the medical department of a university on leaving the gymnasium or a scientific school. The medical course is now about six years divided as follows: The first year is devoted to physics, chemistry and biology; then follows a four-year course such as is given in our better schools, and then a sixth year, which must be spent as an interne in a hospital. At the end of this time the student can come up for his state examina-

tion or it can be taken as in England in two parts, one part after he has finished his laboratory studies, anatomy, physiology, etc., and one after the completion of his clinical work. .

The conditions of medical education in this country are not satisfactory. There are too many medical schools. The preliminary education demanded is often insufficient. Many medical schools are conducted purely as business ventures and give an unsatisfactory course, have poor facilities and lack trained teachers, and graduate a large proportion of men who fail before the comparatively simple and fair examinations required by the state boards and are incompetent to practice medicine.

The Council on Medical Education of the American Medical Association, a committee of five composed of Prof. Councilman of Harvard, Prof. Frazier of the University of Pennsylvania, Prof. Vaughan of Michigan, Prof. Witherspoon of the Vanderbilt University, and Prof. Bevan of Rush Medical College, has been studying this question for the last three years. During the last year members of this council made a personal inspection of the medical schools of the United States in order to determine the existing conditions of medical education in this country.

Each school was visited by some member of this committee and was marked as an individual taking a civil service examination on the character of its facilities for teaching modern medicine and its actual work and the results of its teaching as shown by the success or failure of its graduates who come before the state examining boards for a license to practice medicine.

The schools were divided according to their standing into three groups: Group I, in which were placed all the schools above 70, which was taken as a passing mark. Group II, which included the schools marked from 50 to 70. This mark was regarded as not acceptable, but it was considered that the deficiencies in this group might be remedied by such improvements as would bring the standing above 70. Group III, in which the markings were below 50, the facilities entirely inadequate and the work bad.

In this country there are 160 medical schools about as many as in Great Britain, Germany, France, Austria, Belgium, Holland, Denmark, Greece, Hungary, Italy, Norway, Sweden, Portugal, Roumania, Russia, Spain and Switzerland combined. Great improvements have been made in medical education in this country during the last few years. Until recently, within twenty-five years, almost all the schools in America gave a full medical course in two years. Now all the schools demand a four-year course.

MEDICAL SCHOOLS IN EUROPE.

Austria	7
Belgium	4
Denmark	1
Great Britain and Ireland	43
France	16
Germany	21
Greece	1
Hungary	3
Italy	20
Netherlands	4
Norway	1
Portugal	2
Roumania	2
European Russia	12
Spain	8
Sweden	3
Switzerland	5
Total	153

The above figures are approximately correct and are based on the report of the Commissioner of Education, as well as on the report in the book called "Minerva," a yearbook of libraries, colleges and universities, published by Dr. Karl Trubner, Strassburg. It may be said, therefore, that there are in the United States as many medical schools as in entire Europe.

Many schools have increased their requirement for admission and laboratory and hospital facilities until they can now offer as good medical instruction as can be obtained anywhere in the world. A splendid movement to bring up the requirements of the preliminary education of the American medical student to that of the European standard has been started, and

about fifty schools have agreed to require, in addition to a four-year high school course, one year or more of physics, chemistry and biology by the year 1910.

THE STANDARD.

In spite of the advances made and good work done by a considerable number of American medical schools, the general average is extremely low. Modern medicine demands a good preliminary preparation and thorough technical training. The standard which should be ultimately generally required is the following: 1, A four-year high school education; 2, one year of chemistry, physics and biology; 3, two years in well-equipped laboratories of anatomy, physiology, pathology and pharmacology; 4, two years in clinical work in dispensaries and hospitals, and, 5, one year as an interne in a hospital.

The average student would leave high school at 18 years and graduate at 24 years of age, and to-day it is impossible to acquire a sufficient knowledge of medicine with less preparation. The schools in this country represent all grades from the very highest—the best of our schools are as good as the best in the world—to the very lowest, a large number being little better than diploma mills.

Of the 160 schools only about 50 per cent. are sufficiently well equipped to teach modern medicine. About 30 per cent. are doing poor work and need to make great improvements in their facilities and character of instruction to bring them to an acceptable standard, and about 20 per cent. have no claim to recognition whatever.

It was clearly shown by this inspection that many medical schools are conducted for profit, and that the medical schools conducted solely for the profit of their faculties is a menace to the community and the profession.

There are four night schools teaching medicine in the United States, three in Chicago and one in Philadelphia. It is evident that modern medicine which requires four, five or six years of hard study and work, to which the student must devote the entire day and part of the

night, can not be mastered in the night schools between the hours of 7 and 10 p. m., especially when the student has devoted the rest of the day to some other occupation. Many of the poor schools are conducted as quiz classes for the purpose of preparing the student to pass the state board examination and not with the object of making him a competent practitioner.

THE REMEDY.

How can this unsatisfactory condition of medical education be remedied? Two things are necessary: Proper state control and financial support. It is in the power of the public and the profession to enact and enforce laws which will secure proper standards of medical efficiency. A state without the protection of good medical laws, well enforced, becomes the dumping ground for poorly-prepared medical men. The state examining boards are unfortunately in some states merely political machines.

In this country we need money for medical education. It costs more to educate a student than he can pay in the way of fees. Medical education must secure state aid and private endowment. No better investment can be made by any state than that put into medical research and education. The public must be taught the present condition and the necessities of modern medicine, and philanthropists must be shown that medicine well deserves the support that is given schools of liberal arts, theology, libraries, etc. It is the duty of the profession to secure a high standard of preparation and efficiency of the men who are legally qualified to practice medicine.

THE NEED OF CO-OPERATION.

The public has a right to demand such state control as will insure its protection against ignorance and inefficiency and will secure for it the services of well-qualified practitioners when they apply for such services, and the public should insist on the legislation necessary to secure such protection.

In the effort to secure higher standards the entire medical profession of America, without

regard to the so-called schools of practice, should unite in one common movement to secure the needed legislation and reforms. No attempt should be made by legislation to force the regularly licensed medical attendant on individuals who believe in mental, religious and other means of healing, except in diseases such as diphtheria and smallpox, which are in the control of the state and municipal boards of health and in which the police power is exercised to protect the entire community and applies equally to all classes.

If the public realized the enormous difference that exists between well-trained modern medical service and ignorant, inefficient medical service, they would soon demand and obtain the needed reforms.

The present conditions of medical education and qualifications in this country are not satisfactory. These facts can easily be determined by any one qualified to investigate the subject and should be widely known both to the profession and to the public. Without any sensationalism the profession, the public and the press should be enlisted in the effort to secure the needed state control and financial assistance without which it will be impossible to bring medical education and service up to the desired standard of efficiency.

In this country of great wealth and great population and of high average intelligence we can no longer be satisfied with our present standards of medical education, which are so much below those of Germany, France and England. Nor should we be satisfied with any except the highest and best.

SUMMARY.

In brief, the situation of medical education in the United States may be given as follows:

(a) A three years' careful study has been made by the Council on Medical Education of the American Medical Association of the conditions surrounding medical education in the United States. This study included the inspection of all the schools in the United States by one or more members of the Council.

(b) The great advance in the sciences in recent years has created the necessity for a much broader and more thorough education, both preliminary and medical, for the physician equipped to practice modern medicine.

(c) The standards of the medical schools in the United States are very uneven, representing the highest and the lowest types as compared with the standards of England, France and Germany. As a whole, the standard in this country is unsatisfactory and much lower than in those countries.

(d) A modern medical education demands, 1, a four-year high school education; 2, a year of physics, chemistry and biology; 3, two years in well-equipped laboratories of anatomy, physiology, pathology and pharmacology; 4, two years in clinical work in dispensaries and hospitals; 5, a year as interne in a hospital.

(e) The expense for the equipment and maintenance of the modern medical school is greater than can be met by fees paid by medical students. Medical schools, therefore, need endowments in order to meet the demands of present day medicine.

(f) In the United States, until recent years, medical education was mostly in the hands of medical colleges conducted as private institutions, while in Europe it is controlled by the universities. Within recent years, however, some of the medical colleges in this country have secured university connection.

(g) There are still, however, a large number of schools which are conducted solely for profit, and profit is only possible where the college fails to provide proper facilities for laboratory and clinical training.

(h) There are 160 medical schools in the United States alone, as many or more than there are in all the countries of Europe combined. Of the 160 medical schools in the United State only about 50 per cent, are sufficiently equipped to teach modern medicine, 30 per cent, are doing poor work and need to make great improvements, while about 20 per cent. are unworthy of recognition.

(i) If the public realized the enormous difference that exists between well-trained modern medical service and ignorant inefficient medical service they would soon demand and obtain the needed reforms.

(j) A state without the protection of good medical laws, well enforced, becomes the dumping ground of the low-grade medical school with its output of illy-prepared medical men.

(k) To secure better conditions requires two things: Endowments for medical schools and better legislation providing state control of medical practice and licensure.

(l) This country should not be satisfied with medical standards unless they are at least equal to those of other world powers which are our competitors in commerce, arts and science.

THE STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY.

Dr. F. T. Murphy, Secretary, furnishes the following information concerning the last examination held at Little Rock, July 9, 1907:

Number who took the examination, 35.

Number of whites, 27; colored, 8.

Names of those who successfully passed: Nellie L. Long, Little Rock; T. D. Rountree, Little Rock; Jesse B. McLaurin, Neosho, Mo.; C. H. McKnight, Brinkley; Benj. J. Milam, Mist; H. L. Hill, Paragould; Thos. F. Hudson, Luxora; Jacob C. Glass, Adams, Ind.; Geo. C. Fisher, Jonesboro; Thos. F. Guthrie, Marshall; Thos. H. Cates, Little Rock; Joe L. Casbeer, Colt; S. Price Blackwood, Walcott; R. Newman Brown, Chicago, Ill.; Jno. B. Dooley, Little Rock.

Number of failures, 20.

Names of colleges represented: Northwestern University, of Chicago; Meharry Medical College; University of West Tenn.; Memphis Hospital Medical College; Barnes University; University of Nashville; University of Louisville; Washington University Medical College; Arkansas University, Medical Dept.; Jefferson Medical of Philadelphia; College of Physicians

and Surgeons, Memphis, Tenn.; Vanderbilt University; University of Virginia; University of Tenn.

Number of graduates, 19; number of under graduates, 16; highest grade made, 94 5-7 per cent; lowest grade made, 41 5-7 per cent; per cent required to pass, 75 per cent; date of next examination, October 8th, 1907.

WHAT'S IN A MAN?—"All the constituents of a 150-pound man are contained in 1.200 eggs," said the chemist.

"There is enough gas in a man," he went on, "to fill a gasometer of 3,659 cubic feet. There is enough iron to make four nails. There is enough fat to make 75 candles and a large cake of soap. There is enough phosphorus to make 8,064 boxes of matches.

"Furthermore, that man who is aeronautical will be pleased to know that there is enough hydrogen in him to fill a balloon and carry him up to the clouds.

"The remaining constituents of a man would yield, if utilized, six cruets of salt, a bowl of sugar and ten gallons of water."—Stomatologist.

HER MAIDEN EFFORT.—A certain judge had been away from his native city for several years, and upon his return found it difficult sometimes to recognize former acquaintances. One morning, a youngish woman, accompanied by a tall boy, entered the trolley car and sat down next the judge.

"How do you do, judge?" she said cordially. "I don't believe you remember me? I am Mrs. X."

"Why, so it is! Mrs. X., I am delighted to meet you again. How do you do? And who is this with you? It can't be your son! Bless me, I would not believe you had a son so big."

"Oh, yes," replied the guileless Mrs. X., flattered by his cordiality. "He is my first-born—my maiden effort, judge."—July Lippincott's.

UNCINARIASIS; THE DEVELOPMENT, COURSE, AND TREATMENT.

Ashford and King report their experiments. They observe that the prime object of treatment is to expel the uncinariæ, and our choice of the anthelmintics will naturally be the one most rapidly and easily effecting this result. They attempted to ascertain the relative efficiency of male fern, thymol, and betanaphthol by counting the actual number of uncinariæ expelled by each dose. The highest number of uncinariæ ex- by a single dose of filix mas was eight, while one of the same patients later expelled 3,686 uncinariæ after a single dose of three grammes of thymol. There is a surprising equality of anthelmintic effect after five doses of either drug, though thymol shows a somewhat greater rapidity under equal conditions of proper preparatory treatment. However, when the preliminary purge and, more especially, the abstinence from solid food for a day are omitted, betanaphthol shows much less favorably. The presence of food in the bowel seems to interfere with the efficiency of bethanaphthol more than of thymol, for those who took thymol at their homes expelled their parasites almost as rapidly as those whose diet they could supervise. Frequently in these resistant cases a dose or two of thymol caused a complete disappearance of ova from the stools, while increased doses of betanaphthol did not have so marked an effect. Betanaphthol is not only less efficacious, but it is more dangerous. It has, at times, an irritant effect on the kidney, setting up an acute toxic nephritis in an organ so often the seat of chronic parenchymatous changes. This effect was not common, but the accident was so serious as to warrant their return to thymol as a much safer vermicide. Thymol on rare occasions may irritate the kidney, but its effect is much less severe. It may produce, infrequently, more or less severe collapse. The chief objection to its use is its irritating effect on the bowel and the authors certainly believe that enterocolitis has been initiated by its administration. Eucalyptol is now being studied by the present commission, but their report has not yet been made. Both thymol and betanaphthol were administered in the same manner except that one-half as much

betanaphthol was used at a dose as thymol. Betanaphthol in larger doses did not seem to give proportional results. In choosing the anthelmintic one has to be governed somewhat by the circumstances of the case, condition of the patient, and so forth, but, all things being equal, they decidedly prefer thymol for general use. When it is not possible to use it, betanaphthol is an excellent substitute. The taking of either is unpleasant and, naturally, one wishes to use that one of which the least number of doses need be taken to obtain the greatest result.—J. A. M. A.—N. Y. Med. Journal.

A COLORED BOY'S REVIEW OF A LECTURE.—The vicinity of the Hartman Hotel last night resembled the front of Madison Square Garden during the automobile show. Autos "to burn" were there. The occasion was the last meeting of the term of the Columbus Academy of Medicine. The meeting was addressed by Dr. Joseph H. Eichberg, of Cincinnati, the subject of whose lecture was "Intestinal Obstruction and Its Treatment." The paper was technical and exhaustive, and at the close the speaker was warmly applauded. The subject was discussed by many of the doctors present, and then the whole assembly discussed a Dutch lunch.

A colored boy heard the paper, and in talking the subject over with the chauffeurs, said:

"De doctor certain is de most profoundest embolism ob de stomach orator dat eber was! Dat idea of the enlargements of de diapason due to the diagnosis of de Dutch lunch am a gem. Take de point he raised about de abstraction ob de octopus. Ain't yo' all had em? Den he spoke of de ephermal diagnosis of de truculent conc. Dat hit me ha'd. An' when he tole about dat poor man w'at had de absorbsion of de Asia miner of de Christoher Colon, I jest went straight up in de a'r. 'Deed I did. I didn't get dat pint he raised about the effulgence ob de epidermis, but I noticed all dem doctors sha'ps jest sat an' drunk in ebry wud he annunciated. An' when he took a fall out of dem pleurotomaria lenticularises, he certainly was movin' some wif de bones."

Anyhow, the doctors got a great deal of instruction out of the lecture.—Columbus (O.) Journal.

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Next Annual Session, Chicago, Ill., June, 1908.

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1907-8

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Seventh Councilor District—Clark, Garland, Hot Spring, Montgomery, Saline, Scott and Grant counties. Councilor: J. C. Wallis, Arkadelphia. Term of office expires 1909.

Eighth Councilor District—Conway, Johnston, Faulkner, Perry, Pulaski and Yell counties. Councilor: J. S. Westerfield, Conway. Term of office expires 1908.

Ninth Councilor District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren counties. Councilor: Sam G. Daniels, Marshall. Term of office expires 1909.

Tenth Councilor District—Benton, Crawford, Franklin, Logan, Sebastian, Madison and Washington counties. Councilor: C. E. Hurley, Bentonville. Term of office expires 1908.

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Dallas.....	C. J. March.....	W. H. Simmons.....Fordyce.....	8
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Drew.....	W. A. Brown.....	A. S. J. Collins.....Monticello.....	16
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Original Articles

A NEW LOCAL ANESTHETIC.

By Henry Thibault, M. D., Scotts.

If the title of this paper has led any of you to expect the description of some new synthetic drug, or of some rare and costly alkaloid, I hope that you will forgive me for disappointing you, by confining my remarks to the very common every-day drug, quinine. The anesthetic properties of quinine have long been made use of empirically, and its power to inhibit nervous action by contact with the terminal nerves has long been observed. It has been given in massive doses for the relief of neuralgia, and many times it has given relief. Its inhibition of digestion when given in large doses and for several days by the mouth, shows that it depresses nerve action by its presence. Its happy effect in the severe "nerve-ache" of grippe should have long before now suggested its use as a local anesthetic. Its real value as a local anesthetic was suggested to me by its use hypodermatically for the cure of malaria. I found that, when the second injection was given in the area infiltrated by the first, there was no pain caused either by the needle or the injection of the fluid. Where concentrated solutions had been used this anesthesia lasted from twenty-four to forty-eight hours and sometimes even longer. This experience led me to make the following experiment on myself with a four per cent solution of quinine and urea bimuriate. Into three different places over my right pectoralis major I injected twenty minims of the solution. Area No. 1, I incised at the end of five minutes extending the incision one-fourth inch beyond the infiltrated area without the slightest sensation of pain. Area No. 2, incised at the end of a half-hour with no pain. Area No. 3, incised one hour and a half after injecting and

extending incision one-half inch beyond the infiltrated area without any pain. All these incisions were over an inch long and down to the muscle. They were closed with sterile adhesive strips without suture and were healed entirely on the seventh day when dressings were removed. I then repeated the experiment using a two per cent solution with the same results. I mentioned these experiments to a colleague and he immediately attributed all my success to infiltration, or pressure anesthesia. This led me to make the following experiment: Half way between the umbilicus and ensiform process and two inches to the right of the linea alba, I injected in a line one and one-half inches long, thirty minims of a two per cent solution of bimuriate of quinine and urea. In the same position and over the same amount of surface on the left side, I injected thirty minims of a 0.9 per cent sodium chloride solution. The test was applied by pricking through the entire thickness of the skin with a sharp pointed knife. At the end of five minutes there was no sensation in either place. At the end of fifteen minutes from the time of making the injection, sensation was slight over the area injected with the NaCl solution, while the area injected with the quinine solution showed no sensation. After the expiration of thirty minutes there was no sensation on the right side, but the left area gave pain upon pricking, and within one hour there was complete anesthetization of the right side three-fourths of an inch beyond the infiltrated area; the left side was as sensitive as ever. The right side was tested from this time on at intervals of one hour for six hours without producing any pain. I have since then experimented with all the soluble salts of quinine and have found them all to be good local anesthetics when injected in solutions of 1 1-2 per cent or stronger. The bimuriate of quinine and urea is the most convenient on account of its great solubility, yet it is well to remember that it is partially decomposed when boiled in a silver spoon, giving up some of its chlorine to unite with the Ag and setting free some urea. I have never seen any harm come from

*Read in the Section on Surgery of the Arkansas Medical Society, at the Thirty-First Annual Session held at Little Rock, May, 1907.

giving these partially decomposed solutions.

My first operation with quinine as the local anesthetic was the amputation of a finger that had been crushed in a hay carrier. Sixty minims of a 1-1-2 per cent solution were used. Anesthesia was complete, the patient never feeling any pain except the first prick of the hypodermic needle with which the solution was injected. Healing was by first intention and as rapid as usual. Since then I have used it in sixty-five minor operations with perfect success as far as anesthesia was concerned. Three of these operations were of a nature to thoroughly test the merits of the anesthetic. They were as follows:

Case No. 1—A large fatty tumor of the shoulder weighing nearly half a pound was removed after the injection of one ounce of a 2 per cent solution of bimuriate of quinine and urea. There was a long delay after the injection before the operation was begun. The tumor was adherent to the skin and infraspinatus muscle. Large veins from above and below the scapula made the dissection slow and tedious. The final stitch was put in four hours after the injection was made, but the patient didn't feel it. The only time he felt any pain was once when the incision was extended in order to reach a bleeding vein more than an inch beyond the infiltrated area. I am indebted to Dr. H. B. Hull for the privilege of reporting this case.

Case No. 2—A large carbuncle, honey-combed till infiltration anesthesia was impossible, was injected with thirty minims of a 1-1-2 per cent solution and treated by deep crucial incisions without the patient feeling the least pain.

Case No. 3—A negro man came to me stating that he had swallowed a fish-bone a week before and that he could feel it sticking in the rectum. Superficial examination showed nothing and the parts were so sensitive that he could not stand a digital examination. I injected 1-1-2 inches posterior to the anus, 30 minims of a 2 per cent solution of bimuriate of quinine and urea. In twenty minutes I divulsed the sphincter and removed from the rectum a fish-bone three inches long, which had transfixed the rectum just at the upper margin of the sphincter. The operation was absolutely painless. Now, it has been demonstrated time and again that the sphincter can not be painlessly divulsed under hot water or infiltration anesthesia, although after it is stretched piles can be painlessly removed by infiltration anesthesia.

At my request Dr. W. A. Snodgrass, of Little Rock, tried the quinine solution. He reported to me that he did a circumcision for chancroids with it with perfect success. I

have never tried quinine as an anesthetic in the eye, but from its action when applied to the surface of chronic ulcers of the leg before curetting them, I judge that it will be to some extent at least effective here. A 15 per cent solution applied on cotton pledgets to an ulcerated surface for twenty minutes will render curetting painless. My conclusions from experiments with quinine as a local anesthetic are:

1. It is efficient in 1 to 2 per cent solutions.
2. Healing is as rapid as with any other local anesthetic.
3. It is safer than any other local anesthetic of anything like equal efficiency.
4. Solutions can be kept in stock and boiled repeatedly without deteriorating.
5. It is much less expensive than any of the more dangerous drugs used for local anesthesia.
6. It is neither patented nor proprietary.
7. It can be obtained nearly anywhere.
8. It is efficient when applied in 15 to 20 per cent solutions to raw surfaces on cotton pledgets.
9. The anesthesia lasts from one to six hours.

DISCUSSION.

Dr. Thompson, Hot Springs: I want to thank Dr. Thibault for his paper, for I appreciate it very much. It is refreshing to me to hear of something new, but new things sometimes disappoint us. I had the pleasure of hearing a gentleman from Nashville discuss an operation for piles by pressure without pain. He told us a wonderful story. A few days after that I had a patient of the hysterical variety, whom I assured if she would come to my office, I would operate for piles without an anesthetic and without pain. She was much perplexed, much mystified how I could do it. I assured her it would be all right. So she came and I put her on the table. I felt sure that I would make a success. I wanted to be perfectly sure that there would be no hitch, so I went to extra pains and used a little hot water and decided to make a little injection of cocaine. When attempting to make the injection I touched her with the syringe. She screamed until the whole surrounding neighborhood was alarmed. (Laughter). The people rushed to my door inquiring wildly, "What is the matter?" Some one outside said, "Oh, that is nothing! Just Dr. Thompson operating on a patient for piles!" (Renewed laughter).

The next time I was at Memphis the gentleman told the story again. He recited the wonderful results secured by pressure and without pain. I told him of my success. (Laughter). I said to

him, "Now, my dear sir, let me ask you one question. Have you ever operated on a hysterical patient?" He shrugged his shoulders, and afterwards admitted that in eighteen cases out of twenty treated by this method, he had to chloroform afterwards. In fact, he had the same results that I had. Quinine may relieve pain, and I don't doubt it; and it will probably for a large number of patients, but I am sure you will find, that if you ever use it on hysterical or neurasthenic patients, you will have the same results that I had.

Dr. Hatchett, Fort Smith: Whether quinine as a local anesthetic proves a success; whether Dr. Thibault will be disappointed in his expectations, let its application determine. The paper, I think, is an exceedingly meritorious one, and the doctor deserves very great credit for his line of original investigation. As professional men we shall accomplish nothing if we continually go along in the same old groove and follow out the course our forefathers and predecessors have pursued. For that reason, individually, I want to thank Dr. Thibault for the presentation of the paper. I have used sterilized water, and water without anything in it and have had success. But I intend to try the quinine solution, and I hope my experience will be as satisfactory as that of Dr. Thibault's. I would suggest that every gentleman present try the quinine solution, and if it proves as successful as it has in the instances cited by the author, we certainly have found something of very great value and usefulness.

Dr. Warren, Black Rock: I am not in a position to discuss thoroughly the paper presented by Dr. Thibault, for unfortunately I did not arrive in time to hear it all. I wish to say this, however, with reference to quinine as a local anesthetic. I tried it recently on myself and it proved a miserable failure. I was suffering from an acute attack of lumbago, and as I had heard of its wonderful effects as a local anesthetic, I suggested to a medical friend of mine its use in my case. He injected about twenty grains of quinine solution without any relief whatsoever. The pain was as severe as ever, and he repeated the injection in a few hours using a solution of five grains, making in all twenty-five grains injected. I patiently waited for the local anesthetic effect from the injections, but was disappointed. In fact, I was sorer than ever the next day.

Dr. J. L. Jelks, Memphis: Though I am not a native, but an adopted son of your State, it is very pleasant to meet with so many good friends. It affords me great pleasure to be in your midst but you must pardon my methods of speech. I can hardly hear, and, of course, cannot speak very distinctly when my ears are like inflated

drums. Upon this paper which unfortunately I did not hear, I have heard some discussion. I must say that my experience in rectal surgery decides me on one point. It is not your quinine, it is none other than your pressure if you get anesthesia. There are gentlemen in this presence upon whom I have operated for hemorrhoids and other troubles. There are others in this audience who know that I have operated for them. I did not put quinine in the solution; it is not necessary. If you will get the effect that I will call attention to later, you cannot have anesthesia unless you get pressure. The trouble with some of you who have tried the quinine solution, is that you do not get enough of it in the tissue. You do not get pressure anesthesia. You do not get the anesthesia from the quinine at all, but from the pressure. In my office practice I operate for fistula, hemorrhoids and fissures; and, in some cases I have used one grain to the ounce of eucaïn with salt solution, especially where I am going to operate on the skin. Now, that is not altogether necessary if you can get your patient to stand a little pain when you begin to expand the tissue and skin. If your patient will allow you to inject water, nothing at all but water, you can use your scissors and cut just as much as you please and your patient will positively not feel it. I have treated these cases with absolutely nothing but water, and in patients who were hysterical or so nervous they would not permit me to introduce the smallest sized proctoscope; they would even bear down and strain the piles out. I inject sterile water around the spots I am going to cut off, and can operate without pain. I have repeatedly operated by this method and have had very little trouble. I have had trouble with quinine solution. Perfect anesthesia can be obtained with sterilized water provided sufficient pressure is produced.

Dr. Williams, Hot Springs: I would like to suggest to Dr. Warren the reason he failed was because he did not use as much suggestive therapeutics as Dr. Thibault did on some of his cases. I don't think he was very confident of his results.

Dr. Gibson, Little Rock: It is well enough to discuss theories. I think any member of this society is deserving of credit, who has made a report of his personal experience. Dr. Thibault mentioned this to me more than a year ago. He didn't operate yesterday and break his neck to get in here to report the result of his observations. He does not use water as an anesthetic as practiced by Dr. Gant. I am satisfied that if Dr. Jelks had heard Dr. Thibault's paper he would have thought he was more or less familiar with it. These are results Dr. Thibault has

obtained by actual experiments on himself. I have tried it on him myself. For six or eight hours after injecting ten grains there would be complete anesthesia all around the site of injection. It was not looked for and unexpected. If it were the quinine, it was due to the fact that it was in such condition that the solution would not be absorbed and therefore the pressure would be maintained. I do not feel that we have any right to doubt it, until we make similar experiments, or are in a position to know whereof we speak. As far as Dr. Thompson's case was concerned, he would probably have had just as much trouble with any other method, especially if he tried to operate in his office, as given in that of the hysterical woman (Laughter). I think it would be well for the members to try it and satisfy themselves as to its efficacy. I have seen it tried and know that for seven or eight hours after the injection of ordinary bimuriate of quinine there is complete local anesthesia. In regard to Dr. Warren's case, most likely if he had got down to where the pain was he might have obtained relief. The trouble was not in the skin, it was down deeper. The seat of pain was down in the spinal column. If he had injected where the pain was he would have probably reached it.

Dr. Warren: We went down about three inches. Dr. Morris here did the work. I have an idea that the water pressure has more to do with the anesthesia than the quinine.

Dr. Lutterloh, Jonesboro: I believe I told you I was subject to all kinds of ailments, from appendicitis to hemorrhoids. When Dr. Jelks treated me for hemorrhoids, he filled the hemorrhoid full of sterilized water. I am as nervous as an old woman. I cannot stand a headache even when someone else has it. I had no pain, and it was from pressure of the sterile water that produced the anesthesia and nothing else. I am satisfied of that. As far as the quinine is concerned, I think it is all right. I have given quinine under pressure and the patients have complained of anesthesia around the place where I used the needle. I think it is all right where you can get hold of a patient that will stand it, and with hypnotic procedure as an accessory, it is a good thing. It certainly did relieve me. I think it is a splendid paper and I am glad Dr. Thibault has taken time to prepare it and present it to this Society.

Dr. Snodgrass, Little Rock: I would like to endorse what Dr. Thibault has said about the action of the drug, to which he has made reference in his paper. I have used it on two occasions; once for circumcision and again for opening a boil on the back of the neck, getting per-

fect local anesthesia each time. Both patients admitted that they experienced no pain whatever. I think it is an ideal remedy, and I believe if we can use it, it will be more satisfactory than cocaine. It is not toxic and I think it is better, and I should prefer to use it.

Dr. Thibault: Mr. President, probably the most unsatisfactory feature of a medical society meeting is the fact that so few members ever discuss the paper and so many discuss preconceived ideas without any reference to the subject in hand, or what the author has attempted to inculcate. I believe Dr. Gibson has gone over most of the ground I intended to cover in my reply.

Dr. Thompson refers to a condition where no local anesthesia could be induced. I do not make any special claims for quinine, that it is superior to any other local anesthetic. I fully realize that there are conditions where it is best to have the patient under general anesthesia. The only claim I do make for it is that it is just as effective as cocaine and less toxic and anesthesia more thorough.

Dr. Warren has reported a condition of lumbago wherein he failed to get relief by local anesthesia. He injected the entire area affected. He had pain with the injection. He used ten grains in an anti-toxin syringe. He had a hyper-tonic solution injected under the skin that would produce pain. Ten grains of bimuriate of quinine and urea with one dram of water injected under the skin hurts like any other concentrated hyper-tonic solution, and would be about like the insertion of a red hot copper wire subcutaneously. One-half this quantity in a 2 per cent solution would produce no more pain than cocaine would do.

In Dr. Jelk's case, he produced pressure on one side and quinine anesthesia on the other. The pressure anesthesia was complete in three minutes (it averages one to five minutes) after which it developed in the other side. It disappeared entirely at the end of six hours. The two could be incised an inch and a half and the patient would not experience any pain whatever.

Dr. Snodgrass simply reported the two cases in which he had used the quinine according to my directions with the 2 per cent solution. The one per cent solution will very often be found sufficient. I simply use the 2 per cent solution generally to be on the safe side and to be certain of results. You do not have to produce distention and pressure to get anesthesia. If any of you gentlemen will take a hypodermic syringe charged with twenty or thirty minims of a 2 per cent solution of bimuriate of quinine with urea, or bisulphate of quinine, and inject it exactly as you would cocaine, you can take a scal-

pel and cut all over the area. At the end of half an hour you can extend your incision an inch around it without producing any pain.

If this were simply infiltration, as soon as the fluid was absorbed, or as soon as the pressure was relieved or one-half of it, you would in a short while afterwards have pain; but you do not have that. You have a continuous anesthesia, lasting sometimes twenty-four hours. If you give a patient ten grains of quinine in a dram or two of water in his back, you can give another injection, and as soon as that fluid gets outside of the area previously injected he won't feel it at all.

I cannot take quinine by mouth at all. Whenever I take it it has to be hypodermically. I have frequently injected over the same area previously injected, that is, the day before. Now, there is no doubt about it, if you inject today and it burns and hurts, repeat next day over the same area and you will have complete anesthesia. Take a little child two years old. To-day that child will scream and kick; go back tomorrow and quietly inject the same solution in the same area and the child does not whimper. You cannot attribute that to suggestion, very well (Applause).

ANESTHESIA.*

By C. P. Meriwether, M. D., Little Rock.

The subject of anesthetics is one that has received little or no attention except at sporadic intervals; possibly from the fact that the North and East have used ether almost exclusively, while the South and Southwest have been equally as tenacious in the use of chloroform. Hare, in his last edition of *Therapeutics*, admits that Southerners seem to bear chloroform better than those who live along the north Atlantic coast. Some one now comes forward with the statement that chloroform is much safer when inhaled at a temperature of 80 degrees F. and for that reason has it been so successfully used in the Southern States.

The temperature of the inhaled chloroform vapor may have some bearing on its dangers, but that would in no way account for its almost exclusive use in the South and Southwest.

Anesthetics are seldom given in the open, but always in hospitals, offices or at the homes of the patients, and whether North or South, the physician refrains from giving it when the temperature of the room is too low. Habit and custom, possibly, more than any other reason, has been the geographical difference in selection.

It is not my purpose to discuss the various drugs which produce general anesthesia, but to speak of the two which are universally used,

and at the outset, to state that ether is safer in the hands of the skilled or unskilled anesthetizer, than is chloroform.

Ether given by the so-called drop method (which is not a new one, but has been used by several surgeons for years), is now in use at a great many of our hospitals.

The Esmarch, or ordinary chloroform inhaler, covered with 6 or 8 layers of plain gauze, is held three or four inches above the patient's face and gradually lowered as he becomes more accustomed to the vapor. The ether is allowed to drop from the can through a small groove cut in the cork. The drop should be constant and continuously moved about over the surface of the inhaler; as, in this way, the vapor more readily takes on the same temperature of the room and at the same time becomes mixed with the air, thus entering the lungs warm and diluted. By this method you avoid many of the conditions which were formerly a source of annoyance, both to the patient and to the anesthetizer. There is little or no choking, strangling, coughing or vomiting, which is so distressing to the patients and often frightening them and causing them to resist or struggle.

The patient gets almost as much fresh air through the gauze as in ordinary sleep and he exhales the carbonic acid gas as readily.

The loss of consciousness is due to the effects of ether, and not to a partial asphyxia as is the case with former methods. The time usually consumed to bring the patient up to the point of simple narcosis is from five to seven minutes. I then use six to eight layers of plain gauze fifteen to eighteen inches square, dropping it on the Esmarch and pulling the edges down close to the face and chin. In this way all of the ether is consumed. It is at this point you have to avoid crowding the anesthetic and know that your patient has reached this stage; otherwise, you will bring about the conditions you are trying to avoid, namely, coughing and strangling, but this will only last for a few moments.

From a simple narcosis it only requires three or four minutes to have your patient completely anesthetized, or in from eight to twelve minutes from the beginning. You can now diminish the number of drops per minute by one-half to one-third and keep your patient just over the border line. The pulse need not be watched as the color of face and lip and the character of breathing are the best indications of the condition of your patient.

In about 25 per cent, the lower jaw drops down, which is easily elevated with your index finger. In some, the bronchial secretion will have to be removed from the throat and mouth, which is best

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done with small pieces of gauze on a sponge holder. But this will not occur in five per cent of the cases, unless they have not been prepared, or in cigarette smokers, whom I find have an abundance, and in those cases in which you crowd your anesthetic in the beginning.

It has been my rule to give one-eighth grain of morphia and one-hundred-and-fiftieth grain of atropine forty-five minutes prior to starting the anesthetic; not for any stimulating effect it may have, but principally because the morphia puts the patient in good humor and he comes to the operating table, minus his fright. The atropine has done away with the bronchial secretions which are so annoying.

Pneumonia is very rare when ether is given by this method, for it is not taken in such concentrated form. It enters the lungs mixed with air and almost the same temperature as the room. By placing your finger under the mask you will find it warm, while in the use of the cone, after dashing two or three drachms into it and placing it over the face, your finger would feel almost frigid.

By the method I have described, vomiting and retching, which has heretofore been one of the greatest objections to ether, when the patient is coming out, is reduced to the minimum.

DISCUSSION.

Dr. Lutterloh, of Jonesboro, thanked Dr. Meriwether for bringing so important a subject as that of anesthesia and anesthetics before the society. He narrated his experience with ether while undergoing an operation one year ago. The nausea and vomiting so often present during the administration of and following anesthesia, was absent in his case, for he had abstained from all food and fluids twelve hours previously. The drop method was used and he fell asleep as he was counting 139. Counting seemed to have the tendency to detract the mind from the anesthesia or operation, at least it seems to benefit the psychic element always present in operative cases. He doubted that consciousness was ever entirely abolished by anesthesia, and although in his case, there was entire absence of pain, yet he was at all times conscious of his heart-beat and respiration. He believed the state of absolute and total unconsciousness was equivalent to death. It was possible for one to concentrate his mind upon his heart and lungs during the anesthetic stage so that when the anesthetic is withdrawn a clear recollection is had of the pulse-beat and respiration. He likened anesthesia to deep drunkenness, and believed operations could be performed without the patient experiencing any pain provided enough alcohol be given.

Dr. Morehead, of Stuttgart, recited a personal experience under the administration of chloro-

form. He was absolutely unconscious (laughter), and although the operation was for hemorrhoids, unconsciousness prevailed throughout the operation. He emphasized the statement of Dr. Lutterloh, that it was the thorough preparation and empty stomach at the time of operation that prevented the nausea and vomiting. For two days preceding the operation he ate nothing, and for twelve hours, drank nothing, and had no nausea until the drinking of fluids was resumed some few hours after the operation was completed.

Dr. Canfield, of Siloam Springs, remarked that the subject of anesthesia and anesthetics was always an interesting one to him. The comparative danger of different anesthetics has been referred to and discussed pro and con. Dr. Wyeth had said that the administration of chloroform in some children was peculiarly dangerous because of certain idiosyncracies that existed in the individual child; that these conditions should always be studied and considered, then it became a mere matter of individual choice as to the anesthetic used. The disagreeable after effects of anesthesia should be avoided, and vomiting is the one most common. A prominent Colorado physician had told him recently that post-anesthesia vomiting could be avoided, or stopped if present, by sitting the patient upright in bed. He had not yet had an opportunity to confirm this statement. The irrigation of the stomach, as practiced by Ochsner, is highly recommended.

Dr. Mann, of Texarkana, was glad to know that Dr. Meriwether advocated the use of ether, for he believed it much safer than chloroform. A committee appointed by the British Medical Association to determine which of the two anesthetics was the safer, reported in favor of the latter, yet chloroform was used extensively in England. Every community should have an anesthetic specialist—one who devotes all or much of his time to the administration of anesthetics. One who gives ether habitually should not be allowed to give chloroform for the obvious reason that in a moment of forgetfulness, and as result of habit, the chloroform might be poured, instead of dropped, and death ensue from too great a quantity.

Dr. J. M. Young, Little Rock, said that he, like most all general practitioners, had to give an anesthetic occasionally, and from an experience in giving it several hundred times without a death, preferred chloroform to ether. It had been his practice for years to precede its administration by the hypodermic injection of strychnine, morphine and atropine. He believed the safety of administration depended, not only upon the thorough preparation of the patient, but also upon the constant vigilance of the anesthetist.

Dr. Rightor, of Helena, referred the wide use of chloroform in the South to the fact that the majority of southern physicians are educated in the southern schools, and as chloroform is the most common anesthetic used, naturally they employ it in their practice. During his internship at the Charity Hospital, New Orleans, chloroform was the only anesthetic given, and no distinction was made between the child, middle age and old. The death rate was from four to six per cent. In 1905 ether was substituted for chloroform, except in infants, and there had not been a death from anesthesia since that time.

Dr. Dorr, of Batesville, confessed he did not know which was the safer. His father, a physician, gave chloroform exclusively, always preceded its administration by whiskey and morphine, and in a practice extending over 50 years did not lose a patient from the anesthetic. After vainly trying to convert his father to the use of ether, he adopted chloroform himself, and had been giving it ever since. The remote effects of ether were possibly worse than those of chloroform.

Dr. Runyan, of Little Rock, said he was a convert to ether. He had lost three patients from the use of chloroform which had satisfied him as to the comparative safety of the two anesthetics, and until he had lost three from the use of ether, he would remain converted. The danger of losing a patient on the table was less from ether. Should complications follow the use of ether, there was a fighting chance of curing them. Pneumonia might follow ether anesthesia, but an opportunity was had to treat it. The shock was not so great to the family to say, I believe to-morrow the patient may die of pneumonia, as to say that the patient died on the table from the anesthetic. He referred to three deaths following the use of chloroform—one in Pine Bluff, in which the patient had taken only twenty inhalations; one in Hot Springs, the wife of a prominent gentleman, and one in this city. No blame could be attached to the anesthetist in either case. In the last case, the patient asked to be let up, and although the chloroform was stopped, he died, talking. Until some safer anesthetic than ether is discovered, he said he would continue to use it.

Dr. Dorr, of Batesville: Was an autopsy held on those patients?

Dr. Runyan: No.

Dr. Dorr: Then you cannot say what was the exact cause of death.

Dr. Runyan: I only know they died while taking the anesthetic.

Dr. Dickson, of Paragould, agreed with Dr. Mann, that one who habitually gives ether was unsafe to give chloroform. All depended upon thorough preparation of the patient and the

method of the anesthetist. In his city, chloroform was used 500 or 600 times a year, and had been for a number of years, and he remembered only one fatality. It was better to lose one patient on the table from chloroform than many in the bed from the effects of ether. The question that concerned him was not the shock the family would receive on being told of the death of the patient on the table, but the total percentage of cures he might effect by the operations. There was not a fighting chance in treating pneumonia following ether; the patient died or got well regardless of treatment. He unqualifiedly preferred chloroform. It was a beautiful anesthetic, but should be largely diluted with air and plenty of time taken to administer it. The stage of excitement was greatly lessened by the hypodermic injection of morphin and hyoscin, or atropin. He closed by remarking that he had seen chloroform administered several thousand times, and pledged his allegiance to it until something better could be presented.

Dr. Hatchett, of Fort Smith, laid great stress upon the thorough preparation of the patient, and unless the case precluded this possibility, no detail should be overlooked. Instead of leaving the stomach empty as had been practiced so long, it should be partly filled with water just preceding the giving of the anesthetic. The secretions excited by the anesthetic were absorbed by the water, also the gas that was swallowed from the anesthetic. This prevented irritation of the nerve terminals in the stomach, and vomiting was avoided to a great extent. Sometimes the water was absorbed by the gastric mucous membrane, or vomited, and in either case, the stomach was left clean. He had recently been practicing this method, and was very much gratified with the results. He had seen thousands of anesthetics in this country and Europe, but had yet to witness a death from the effects of chloroform or ether. One who has an interest in a case should not be permitted to give the anesthetic, and for this reason, the surgeon should be relieved of this charge.

Dr. Weems, of Fort Smith, said that he had undergone an operation and while under the influence of the anesthetic, although all power of resistance was gone, as well as sensation of pain, he was conscious of the conversation engaged in by the surgeons as to how they should make the incision. He believed the A. C. E. mixture should be used more, nausea and vomiting certainly being less common after its use than when ether or chloroform is employed.

Dr. Barlow, of Dermott, referred to one important thing which had not been touched upon—suggestive therapeutics. Miss Alice McGraw, of Rochester, who had given anesthetics over 16,000 times, using ether mostly, employed this

aid, and said that much less ether is required than when it is not used.

Dr. Thibault, of Scott, said the personal experience of Dr. Weems, and the suggestion of Dr. Barlow, reminded him of a case that occurred in his practice three years ago. A very skillful physician who was a firm believer in the value of suggestive therapeutics, administered the chloroform for him, and succeeded in hypnotizing the patient before she went under the influence of the anesthetic. She was conscious of everything, but unable to move, as he told her she would be. She felt the pain of the operation and repeated the conversation that took place in the operating room. She was partly hypnotized and partly anesthetized. It was possible to carry suggestion a little too far in administering an anesthetic, especially if the patient be inclined to hysteria.

Dr. Gann, of Benton, said that he was not surprised at the hesitation of patients to undergo operations when doctors differ so much. He agreed with Dr. Mann in all the essentials brought out in his discussion.

Dr. Cox, of Helena, wished to call attention to the fact that the question of mortality and general anesthesia had long been settled, and reminded the society that when chloroform was given, the hazard was just four times as great as when ether was given.

Dr. Hughes, of Pocahtontas, rather liked the suggestion made by Dr. Lutterloh in regard to whiskey anesthesia. He believed he would prefer it if he were the patient, although he had taken chloroform once. He preferred ether when operating in a close room and where the patient could be properly cared for; but in emergency work, chloroform was his choice. One of the great dangers in chloroform anesthesia was avoided by giving in advance morphine and atropin.

Dr. Oscar Gray, of Little Rock, in speaking of Ochsner's practice of irrigating the stomach immediately after the operation, said that he had experienced quite a little difficulty in attempting to do this. The resistance of the patient was one great objection, and bitten fingers and tubing was by no means uncommon. His method of preparing the patient did not differ from that outlined by the essayist, and he had always used more or less suggestion, this being nothing but obtaining the confidence of the patient.

Dr. Hilton, of El Dorado, asked the essayist to state the reasons why a change should be made from one anesthetic to another.

Dr. Meriwether expressed his appreciation of the wide discussion provoked by his paper. In regard to leaving water in the stomach just prior to administering the anesthetic, it had been his experience, based upon 500 ether anesthetics, that where all food had been prohibited for from twelve

to eighteen hours and then water allowed, the conditions seemed to be worse, especially the retching and vomiting. In cases of the accidentally injured, where often a hearty meal was eaten just before the injury was received, the conditions were more favorable and recovery more prompt than where water was allowed just prior to giving anaesthetic after the patient had been starved for 12 hours. No food for 12 hours and no water for 4 to 6 hours prior to giving anesthetic is my rule. Having the patient count was of some value, especially when a stranger to the anesthetist. He doubted that pneumonia ever followed ether anesthesia by the drop method, and when it did occur, it was perhaps traumatic, due to vomitus getting into the lungs. The old method of giving ether was not without danger, for it was given in such quantity that the cold vapor extracted so much heat from the lungs that freezing was produced. He recited a case of Bright's disease with grave symptoms present in which he had given ether by the drop method without any dangerous symptoms occurring. The A. C. E. mixture was the most dangerous of all the anesthetics for the reason of differing specific gravities of the ingredients. The death rate from the A. C. E. mixture was 1 to 7,000; from chloroform, 1 to 12,000, and ether, 1 to 30,000. He differed from Dr. Mann in his statement that one who is in the habit of giving ether should never give chloroform; but on the contrary believed such a one was absolutely safe. The anesthetist who gives ether almost exclusively, had no fear of the anesthetic, but when he gave chloroform, the greater danger was remembered and he became more careful.

A CASE OF FATAL HYSTERIA.*

By H. H. Canfield, M. D., Siloam Springs.

In choosing the above title for my paper I am aware that I run the risk of severe criticism, for Anders says that "True hysteric patients never die of the disease, nor does the hysteric spasm ever end fatally," and this is the general belief of the profession. He also says that "The great tendency of the profession, unfortunately, is to overlook true organic conditions and ascribe the patient's symptoms purely to an hysteric attack," while Strumpell remarks that "An experienced physician is seldom greatly puzzled by hysterical affections." This flat contradiction by two such eminent authorities, or the accusation that the tendency of the profession is toward inexperience,

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depending on the way you look at it, seems a sufficient apology, if such be needed, for presenting a paper on the subject of hysteria before this society.

I believe with Anders that the custom is all too prevalent of classing as hysterical certain types of nervous manifestations until death causes perforce a change of diagnosis, unless indeed we come to the belief that hysteria is sometimes fatal, to which belief I am strongly inclined. The purpose of my paper however is to deny the ease of diagnosis, and to raise a warning voice against not only the above mentioned general tendency but also the idea that it is an insignificant malady. The old notion that the hysterical patient is a deliberate, conscious liar, simulator, and poseur, though no longer admissible, is still too often retained. These acts, merely the result of unconscious auto-suggestion, are as little blameworthy as the babblings of an idiot or the delusions of a paranoic. And so I plead for greater lenity for these poor unfortunates who are "Cast in a fairer but a frailer mold."

As to the ease of diagnosis I leave you to judge. You all have access to many admirable texts and in any well ordered library you may read of the various stigmata, motor and sensory, with hyperesthesias and anesthasias, general and local, and of special sense and of paralysis, contractures, tremor, spasm, joint affections and reflex disturbances, to your heart's content and your brain's confusion. But if I had the language of a Shakespeare I would draw the "deadly parallel" between this case and a typical cerebrospinal meningitis, and bid you to "Look on this picture, then on this, the counterfeit presentment of two brothers." I must content myself however by describing to you a case that recently came under my care, and caused me a great deal of anxiety and no little chagrin, in the hope that profiting by my experience some brother physician may be more careful of his prognosis, if not his diagnosis, and so be spared a like embarrassment.

The patient was a young married woman, about 35 years of age, mother of one child, a healthy but nervous girl of 7 or 8. She was of a decided blond type, small size and spare build, of quick movements and a very nervous temperament. Her mother was of the same disposition, and subject to nervous spells, as is also a living sister.

I found her lying on the sofa, an anxious husband watching over her, while she complained of severe pain in her back and the back of her neck, headache and sick stomach. She said she felt chilly and hot, and could swallow with difficulty. Her bowels were constipated.

Inquiry developed the following prodromata. She had had a few days of diarrhoea, being ordinarily of constipated habit. Had been tired with much headache and backache, and had been unusually fretful and irritable, demanding for several months that her husband give up his occupation and move back east to their former home. He had already made two moves of that kind to please her, being a very indulgent husband, but seeing no end to that kind of business, he had refused to comply with her request. She thereupon accused him of caring little for her welfare, and intimated that she would not survive the year here. To show him apparently that she harbored no ill-feeling because of his refusal she signed some blank checks, the money of the family being in her name, that he might the better handle it "if anything happened."

Some years before she had an attack that proved to be a local peritonitis from ovarian and tubal disease, which resulted in an operation and removal of the right ovary and tube, after which she enjoyed good health. A spell of typhoid fever some three or four years previous was the only other serious sickness in her history, except a supposed heart trouble, though she had always been whimsical and longed for sympathy.

On examination I found her temperature normal, pulse small and rapid, tongue clean, and an evident anxiety about herself which she seemed desirous that her husband and I should share. She complained of tender points along the spine, with some stiffness of the nucha and jaw, which was certainly intermittent and appeared to me to be wholly voluntary. Her stomach also seemed very tender. Heart was sound. Her pupils were normal in size and reaction and there was no disturbance of vision. There was a general hyperesthesia, and exaggeration of the plantar and patellar reflexes. At varying intervals she would jerk nervously, and vomited and gagged frequently. Movement seemed to increase her pain.

There being no fever, though she claimed to have had a chill the day before, and with so clear an hereditary element, and such temperament and personal history, I dismissed the fear of acute leptomeningitis. I had at first entertained, and tried to reassure them by telling them that her trouble was a transient one and that she would soon be well, although the symptom-complex bore a striking resemblance to some serious organic disease. I accordingly gave her small doses of calomel, ordered a mustard plaster to the epigastrium, and along the spine a belladonna plaster, and left.

The next day, her symptoms growing worse rather than better, with more pain and nervousness, I gave some monobromated camphor and croton chloral, with little if any benefit; and finally in the evening, her jerking having developed to an alarming degree, and a wakeful night being again threatened, I gave her a hypodermic of morphine sulphate, 1-4 gr., afterwards trying to secure relaxation with a hypodermic of apomorphine, gr. 1-20, but to no avail. She did not rest well in spite of the morphine, and next day I put her on potassium bromide and chloral hydrate per rectum, feeding by that route having been instituted at the beginning to rest the stomach.

Before this could take effect a colleague was called in my absence who pronounced the condition hysteria, although it was now the third day of my attendance, and gave her another hypodermic of morphine, but with little effect, until later in the day the bromide and chloral got in their work, and at last she became quiet and slept. Her jerkings having given place to spasmodic stiffening of the limbs and true opisthotonus, I had begun to doubt my diagnosis, and the more because I had found her at times with a slight temperature. This would be at one visit a half degree, at another two degrees, and at another none. A decided conjunctival redness had also appeared, and a slight divergent strabismus was transiently present, with some diplopia on inquiry. These were both intermittent. So, although her actions were distinctly volitional and with much attitudinizing, and she was acutely observant of all that was going on, as the family and friends easily noticed after I called their attention to it, I asked for counsel. Up to this time she had remained entirely conscious, though at times apparently asleep. She would peep out of the corner of her eyes, and afterward admitted laughingly that even when her stupor had seemed the most profound she knew all that they said and did, and proved the truth of her statements by telling them all about it.

She had been allowed to come out from under the influence of the medicine after about 24 hours, and awoke perfectly rational and self-controlled, and possessed of a belief that she would speedily be well. This however soon gave place to a fear that the convulsions might return, which they soon did and harder than ever, but they were again speedily and completely controlled by the rectal medication.

My counsel attended the case conjointly with me for two or three days, and agreed that the diagnosis of hysteria was the only one tenable. The reflexes were variable, sometimes exaggerated, sometimes abolished, but we always thought the latter due to the medicine. Even an apparently profound coma that came on cleared up when we stopped the medicine altogether, and we decided that it was a bromide and chloral narcosis.

Accordingly a purely symptomatic and expectant treatment was persisted in, with the result that she soon recovered so far as to void her urine normally (in her stupor we had to catheterize her), and to empty her bowels thoroughly with the aid of large enemata. Her mind was clear, and she was in the best of spirits, joking and laughing with the friends and relatives, and appetite good. The disease had now lasted about two weeks, and in spite of the occasional slight fever, conjunctival injection, transient squint and pupillary inequality, pallor of skin, tonic and clonic convulsions, and the general severity of the symptoms the complete recovery added one more argument in support of our diagnosis, and we still called it hysteria.

Two days of continued improvement followed, when an evening came for a lecture that the husband and his sister wished to attend. On my advice that she was safe to leave they went, and came back after something like an hour's absence to find her in almost constant convulsions. After trying in vain to quiet her, I was sent for, and noting that she was conscious of my entrance and gave me a look of recognition out of half-closed eyes, and learning that she had been averse to the husband going out, I gave her a hypodermic injection of apomorphine certain that it would limber her up, which it did most effectually, without however causing her to vomit. The limbering-up was indeed so complete and the pallor so great that I became very anxious, and when I found that her pulse was scarcely perceptible and that breathing had nearly ceased I performed vigorous artificial respiration until I was exhausted, and injected strychnine hypodermically. All was of no avail, and death followed speedily. Autopsy was not obtained.

In closing this rather lengthy paper I wish to again emphasize the need of greater caution in arriving at the too common diagnosis of hysteria, or, having so diagnosed a case, of more than the usual careless observation and consideration, and a more guarded prognosis.

DISCUSSION.

Dr. A. U. Williams: Something like a year ago I had a case almost similar to the doctor's placed under my care, which had been sent to me by a medical friend from Missouri, a good practitioner, who diagnosed it hysteria. I treated the case for some two or three weeks and called into consultation one doctor after another, and all agreed that it was simply hysteria. The case went right along like the doctor's case, showing the same history, until she died. Her husband being a very good friend of mine, I took the liberty of asking that an autopsy be made, which was granted. I found she had had performed an operation of which I did not know. Both ovaries and the uterus had been removed by Dr. Harris, of Chicago. There were a number of perineal adhesions, about one foot of the small intestine was constricted from these adhesions, there was a lot of gangrenous inflammation, and the stricture, at the time of death, was found in a gangrenous condition.

Dr. Canfield: Was the autopsy complete as to the nervous system?

Dr. Williams: No lesions were found at all by the expert.

Dr. F. T. Young: I do not like to disagree with Dr. Canfield in his diagnosis, but I believe his case was one of tubercular meningitis. Of course, it ran rather a peculiar course for that disease. It was not typical at all, but that is characteristic of tubercular meningitis. It is apt to take any form, or apt to cause almost any sort of symptoms of a nervous character. What was the character of the respiration?

Dr. Canfield: The respiration was about as irregular as the other symptoms.

Dr. Young: I consider it very unfortunate that the doctor did not secure an autopsy in this case, because I feel that tubercular meningitis was the trouble. It is a misfortune that the country doctor, and doctors in small towns have to contend with this feeling; the feeling is so strong against autopsies that they will not permit it. However, I find that by insisting in these very peculiar cases that we do at times get autopsies where we do not really expect to. About the diagnosis of hysteria, as Dr. Canfield remarked, we are a little bit too prone to call any disease of the nervous system of a more or less transient character, followed by improvement of a greater or lesser degree, hysteria or neurasthenia. And it covers just about as much territory as the word "malaria" used to cover. It does not express as definite a symptom-complex as it should, and we apply the term too loosely. I have seen cases of hysteria that I thought were going to die in their attacks of convulsions and coma, and the reason I thought they were hysteria

afterwards was that they got well. If they had died, I would have thought that they were something else (Laughter and applause).

Dr. Frank Jones, Memphis: This is a very remarkable case, but rapidly thinking over it without having seen the case, which I certainly would like to have done, there are three things that present themselves to me: chronic leptomeningitis, hysteria and cerebral tumor. If you take and analyze the three that are here presented, you will find that there are many symptoms in common. You said at one time the reflexes were exaggerated and at another they were abolished. You said at one time inequality of pupils, and cross eyes at another. And that the temperature never ran above normal, except on those two occasions; zig-zagging up and down. And that those paroxysms were marked by excruciating headaches. With inequality of the pupils, with this zig-zag condition, with these reflexes at one time and their absence at another, with the pronounced headache, and the manner in which she died with the convulsions, I would certainly investigate the case further. Did the pulse jump down below 50 or 60?

Dr. Canfield: No.

Dr. Jones: I would certainly investigate the case with reference to a brain tumor. As the doctor said, I would have diagnosed the case, from the experience that he had, and the patient dying, or possibly have been inclined, as he was, to call it a case of hysteria. How old was the woman?

Dr. Canfield: About 35 years of age.

Dr. Jones: How many children?

Dr. Canfield: Just this one child of 7 or 8.

Dr. Jones: What was the condition of the aorta?

Dr. Canfield: Nothing abnormal. It seemed to me that the heart was sound.

Dr. Jones: It might have been from some thrombic foci or some septic infarct; possibly a slight infarct in the brain. Certainly it was the brain, and you would have to distinguish between chronic leptomeningitis, hysteria and brain tumor. In a case like that, an autopsy certainly would come very much to the relief of the physician. But, unfortunately in this country of ours, I see a prejudice that does not prevail in the East and in the West. An autopsy on the brain would have revealed a great many things. She might have had abscesses or tumor from septic infarct, but, taking it as a whole from the symptoms, I would believe it was cerebral tumor, and possibly infarct with tumor.

Dr. Olive Wilson: This reminds me of a similar case that I had, only more exaggerated. The trouble is that I never had an opportunity of observing her but for about five hours. She had these

attacks and got better, but finally died. We had a post-mortem examination, and found a tumor in the anterior lobe of the brain.

Dr. Canfield: I wish to thank the doctors for discussing the paper. To me it was a great puzzle, and I regret deeply the inability to get an autopsy. I cannot help but feel, as I said in the paper, and as Dr. Young repeated, that if she had gotten well I would have known that I was right, but since she died I am afraid I was wrong. Dr. Young remarked that he thought perhaps it was tubercular meningitis because the symptoms were so atypical.

Dr. Young: I said I thought it was tubercular meningitis although the symptoms were atypical.

Dr. Canfield: As to Dr. Jones' remarks that it might have been a brain tumor, it seems to me that the symptoms were too vacillating. It seems to me that they were too inconstant for brain tumor. As to the pain in the head, so far as she was conscious and said anything she admitted that she had headaches, yet it did not seem to be closely localized as I would think it would be had it been a brain tumor.

SPECIFIC AND ASSOCIATED LESIONS IN CHRONIC INTERSTITIAL NEPHRITIS.*

By Anderson Watkins, M. D., Little Rock.

Inasmuch as this is the first year of a new Section the writer has chosen a subject which is not only of interest to himself, but which he believes, presents certain features of practical value to the clinician. The tendency to treat the symptom-complex known as chronic Bright's disease as an entity of the kidney only is still so marked as to justify, in my mind, a brief review of the renal and also the associated lesions.

Some interesting questions naturally arise: Is there a chronic interstitial nephritis independent of a preceding acute or sub-acute process whether diffuse or interstitial? Granting an affirmative, is the process confined to the kidney or is the renal pathology but a part of the more general involvement? What is the physiologic pathology of chronic Bright's disease?

Of the chronic types of nephritis we recognize (a) chronic diffuse nephritis, known also as large white kidney. The more usual causes are chronic intoxications including deranged metabolism. The

blood of such patients has experimentally produced the lesions when injected into animals. The disease especially occurs in men between the ages of 20 and 40 years. It is only necessary to say, in reference to its pathology, that the lesions are principally parenchymatous; granular, hyaline and fatty degenerations of the epithelium. A variety of this form, the chronic hemorrhagic, shows more blood extravasation than degeneration, as we would expect. The interstitial changes are not marked.

We now approach the interstitial forms, the predominant feature of which is fibrous tissue proliferation within the stroma with a tendency to contraction. Many of the glomerular and tubular changes are secondary to the stroma proliferation. First then follows naturally the preceding, the (b) chronic diffuse nephritis with induration or secondary chronic interstitial nephritis. This we may, with reason, consider an advanced stage of the diffuse form, with secondary connective tissue proliferation, more often in the hemorrhagic than the white kidney. The size of the kidney depends upon the stage of the fibrous proliferation, being larger at first and contracting secondarily. The principal alterations are in the glomeruli with increasing stroma proliferation which may well be deemed secondary to the former. We have then here the picture of a kidney in which, as in other organs, the fibrous changes are secondary to destruction of parenchymatous inflammation.

The third type (c) primary chronic interstitial nephritis is the principal subject under consideration. The nomenclature also includes gouty kidney, granular kidney, red granular kidney and contracted kidney. I am aware of the question stated earlier in this paper, viz.: Do we have a primary chronic interstitial nephritis? In other words, Do the stroma changes precede those in the parenchyma? I believe that an affirmative admits of demonstrable proof.

To quote Councilman: "The kidney in diffuse arterio-sclerosis shows degeneration and destruction of parenchyma and increase of interstitial tissue." But it may well be said that the parenchymatous destruction may be secondary to the increase of connective tissue. The same authority says that it is generally accepted that interstitial changes are secondary to those of the parenchyma and that there is no evidence of independent increase of connective tissue in arterio-sclerosis and attend high arterial pressure, loss of vascular regulation, nutritional disturbances and the damage upon themselves caused by impairment of the kidneys.

Stengel believes that the acute interstitial nephritis of the pathologist, occurring in acute

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toxemias and infections can go to the development or contracted kidney, but practically, the latter is usually a concomitant, and generally a comparatively late one, of arterio-sclerosis and that at present we may regard it as part of a more general disease. Hektoen believes that anatomically primary chronic interstitial nephritis is not easily separable from the advanced secondary form, but there is a difference. The experience of clinicians demonstrates that there are two distinct forms of the lesion, which at certain stages may present practically the same anatomical features and may possibly be accompanied by the same organic changes elsewhere, but in the initiation of the fibrous changes, are widely apart as to cause, duration and clinical history. In a practical consideration of this subject we should not relegate the clinical pathology to a position inferior to that of anatomical pathology.

The primary type develops insidiously without evidences of previous inflammation; no matter when the first symptoms are discovered they are already those pertaining to chronic Bright's disease. In this class there is no history of preceding acute or sub-acute process. When we diagnose a case of primary interstitial involvement, it is by means of a train of symptoms associated with a few urinary characteristics distinct from the more violent evidences of the secondary form. The etiology is obscure; probably of metabolic origin, acting for a long time, possible contributory factors are gout, alcohol, mineral poisons. Experimentally chromium salts have induced the typical lesions. Mental strain occurs in the history of a number of cases. Diabetes, according to Senator, may induce contracted kidney, especially in early life. The disease is found most frequently in men past 40, though owing to its insidious character it is often impossible to trace the beginning. Constant concomitants are vascular hypertension and hypertrophy of the left ventricle and frequent associates, arterio-sclerosis and retinal changes.

The pathology in the kidney is familiar enough. The organ is small, hard and granular, with adherent capsule and imbedded in a mass of fat. When the capsule is stripped, the surface resembles a hob-nail liver, the elevations being parenchyma, and depressions, connective tissue. Cysts are not infrequent. The color is reddish or mottled. The pyramids are absolutely reduced, relatively increased, with fibrous bands extending from them into the cortex. Calcareous and urate deposits are not unusual. The pelvic fat is increased. The cut arteries stand out prominently and do not collapse.

Histologically the most striking change is increase of stroma with decrease of parenchyma. Many glomeruli are destroyed, being replaced by a hyaline ball surrounded by a thickened fibrous

capsule. As in a cirrhotic liver we find occasional areas of compensatory hypertrophy of parenchyma. Many arteries, especially the glomerular vessels, have thickened coats and undergo hyaline transformation. Tubular atrophy and degeneration are marked. The striking feature, connective tissue increase, occurs in the pyramids, between tubules, in the cortex about the glomeruli, and around the vessels, varying from round cell proliferation to scar-like tissue. In brief, in a pure type, the essential lesion is in the stroma, the parenchymatous degenerations being secondary. The clinical history and symptoms tend to bear out the idea of a primarily contracted kidney.

Now, as to the second question, that is the separate entity or, on the other hand, association of granular kidney with other lesions. This question is of great importance clinically. We have learned long ago that the renal disease is commonly associated with endarteritis, being only a part of the lesions which in the aggregate go to make up chronic Bright's disease.

Miller believes that hypertension may occur without glomerular involvement but never without renal inadequacy. Potter states that the relations between arterio-sclerosis and nephritis are complicated, many poisons affecting both systemic arteries and kidney structure. Prolonged high tension is a frequent cause. The process is most common in the aorta, splenic, coronary, cerebral, renal, and splanchnic arteries. Loeb believes arterial hypertension in chronic nephritis to be due to circulatory obstruction in the tufts, thus calling upon the cerebro-spinal axis for greater pressure, the response being increased action of the vaso-constrictors. A constant feature of the symptom-complex is hypertrophy of the left ventricle, which may, in later stages, result in dilatation. Not so very rarely towards the end, the right side of the heart is dilated. When unassociated with valvular lesions we have practically only a left ventricular hypertrophy with subsequent dilatation. There is an increased demand upon the heart, causing the enlargement; a chronic interstitial myocarditis occurs, followed by hyaline or fatty degeneration. According to several authorities and our own experience, the ventricular enlargement is constant in Bright's disease; the hypertrophy being secondary to increased tension.

Other organic lesions and complications are miliary aneurysm, cerebral hemorrhages, chronic passive congestion of the liver and spleen, pulmonary edema, pneumonia, pericarditis, anemia, general anasarca, dyspnoea, gastro-intestinal disorders, retinitis with retinal apoplexy and anemia. In order to show the numerous anatomic lesions one may find in chronic Bright's disease I desire to report briefly the following:

1—C. Y. Female; age 45; history of illness two years. General anasarca, dyspnoea, weakness, cardiac pains and palpitation. Temperature 97.3-5 F.; pulse 64 to 70, increased tension.

Arteries, sclerotic; Heart: increased dullness, presystolic murmur over apex, not well transmitted.

Lungs: harsh bronchial rales well distributed.

Feces streaked with blood; liver and spleen not palpable.

Urine: diminished, yellow, acid, specific gravity 1010; albumen, hyaline and granular casts; renal epithelium.

The patient died in ten days in coma. Autopsy: chronic adhesive pleuritis; pulmonary oedema with compensatory emphysema; hypertrophy of the left ventricle; acute fibrinous pericarditis; chronic vegetative endocarditis; adherent vegetative mitral valve; aortic and coronary sclerosis; chronic adhesive peritonitis; chronic passive congestion of the liver and spleen and chronic interstitial nephritis. The left kidney was normal in size, pale and granular while the right was contracted. Microscopic examination of the kidneys confirmed the anatomic diagnosis.

Now here is a case which presents some features accidental and foreign to Bright's disease, but also shows the essential lesions of the latter. In this category we may place the renal pathology, the hypertrophy of the left ventricle, the arterio-sclerosis, the pulmonary oedema and the congested liver and spleen. While the patient gave two years as the duration of her illness, the character of the tissue changes was such as to necessarily involve a much longer period. Vascular compensation and renal adequacy had very probably begun to fail two years ago, where as the pathologic processes antedated this failure by many years.

2—J. W. P.; colored, male; 49 years. Clinical diagnosis: suppurating contusion (cause of entrance to hospital) of face; acute pericarditis; arterio-sclerosis; chronic interstitial nephritis; general anasarca; uremia.

Autopsy: diffused arterio-sclerosis; acute fibrinous pericarditis; adherent tricuspid valve; chronic adhesive pleuritis; pulmonary oedema; chronic passive congestion of the liver and spleen; chronic adhesive appendicitis; chronic interstitial nephritis. The kidneys were of the typical contracted variety. Again, in this case we have the association of renal and vascular changes. The wound in the face was merely an infected contusion of the soft tissues and had no bearing upon the death of the patient.

3—Female, white; age 71. Clinical diagnosis: chronic interstitial nephritis; myocarditis; aortic roughening, arterio-sclerosis; old pthisis.

Autopsy: general arterio-sclerosis; roughened aortic valves; chronic interstitial nephritis.

4—White, male; age about 40. Clinical diagnosis: uremic coma.

Autopsy: one kidney somewhat enlarged, the subject of a hemorrhagic nephritis; the other a mere shell of capsule and pelvis with very little cortex and medulla; vascular changes not marked.

Of the last two cases, the fourth is doubtful as to the primary nature of the interstitial nephritis; indeed, from the acute nature of the process in one kidney and extreme contraction of the other as well as the absence of perceptible vascular lesions, I doubt the primary interstitial involvement in this instance. The third case showed the ensemble of Bright's disease.

The clinical pathology is interesting from a diagnostic and therapeutic standpoint. Arterial hypertension and hypertrophy of the left ventricle are invariably present. Cardiac irregularity: gallop rhythm and intermittency are common. Elliot reports higher blood pressure in chronic Bright's disease than in arterio-sclerosis unassociated with the renal lesion. The blood shows noticeable red-cell anaemia, chlorosis, hydremia and lowered specific gravity. Urea is increased, chlorides may be augmented or decreased; the freezing point is lowered, viscosity increased and the blood contains a toxic substance; dyspnea, visual anomalies and the various uraemic manifestations belong to the advanced stages.

The urine, excepting acute exacerbations and terminal stages is increased in quantity, pale, of a specific gravity of 1010 to 1015, clear, acid. Albumin at times is present in small amounts, at others absent. Casts may be absent; when present they are few and of a hyaline or finely granular nature; uric acid and calcium oxalate crystals are usually present. The urinary diagnosis is based more upon the appearance, quantity and specific gravity of the urine than upon its contents. The results of urinary examinations should never be taken alone as a basis for positive diagnosis. Negative urinary findings do not negative the diagnosis nor positive findings alone render the diagnosis positive. But a urine such as described, found in conjunction with vascular and other symptoms justify a positive announcement.

There is increased chloride retention in advanced cases of nephritis; indeed it is probable that even in health, chlorides ingested in excess are retained, though without oedema. In terminal nephritis, chloride retention increases osmotic pressure, producing oedema. This seemingly established fact is of importance to the diet of nephritics. Widal and Javal were able to cause oedema to appear and disappear at will by regulating the chlorides in the diet of nephritic patients.

My own limited experience in the withdrawal of salts from the diet of advanced nephritics tends to the belief that such a step is beneficial.

The pathology of uremia, embracing proliferation and degeneration in the vessels of the nervous systems, myocardium, spleen, liver and pancreas, catarrh of stomach and intestine, and pulmonary oedema is only of theoretical interest in this paper. Experimental findings tend to cast doubt upon the theory of retention, as the cause of uremic poisoning. Investigation, rather points to an internal secretion of the kidney, which influences metabolism; interference with this secretion causes uremia. Champin obtained good results by feeding nephritic patients with macerated young pigs' kidneys; a dis-intoxication, with improvement in all the symptoms resulted.

The purpose of this paper is to emphasize the fact that we may have a primary chronic interstitial nephritis, that is, one which is not secondary to the diffused inflammation. Further, that the nephritis is but one lesion of a generalized process of fibrosis, which presents the features of Bright's disease. How often do we see a positive diagnosis based upon a few urinary anomalies? And again, how often do we observe in the face of unmistakable evidences of Bright's disease, a condition of manifold lesions, that the attendant physician treats the kidneys alone. The insidious nature of the disease, the difficulty of an early diagnosis are features differing from those of the frank inflammations of the kidney. The numerous vascular and other organic concomitants and complications are of no less importance than the kidney pathology. It is in the hope that a review of the numerous pathological changes will stimulate us to apply our knowledge practically to the treatment of a general disease instead of a local one, that this paper is written.

THE CURE OF A CASE OF OSTEOMALACIA.

In an article on the suprarenal glands and osteomalacia, in the *Munch. Med. Wochenschrift*, 1907, P. 278, L. M. Bossi, of Genoa, describes the almost marvelous cure of a serious case of osteomalacia by subcutaneous injections of Adrenalin. The patient was a multipara, 38 years of age, who was **enceinte** in the eighth month and had a well defined osteomalacia. After seven hypodermatic injections of Adrenalin, each of which consisted of 1-2 cg. of Adrenalin of the 1:1000 solution, the patient fully recovered. * * *

AMEBIASIS.*

By J. L. Jelks, M. D., Memphis, Tenn.

I believe the greatest honor I have ever had conferred upon me is that the chairman of a section in a great association like this, the Arkansas Medical Society, should retire and permit me to take his place for a few moments. However, I believe that when I shall have done with you, I will have interested you in a subject that Arkansas doctors are or should be greatly interested in.

Amebiasis, or improperly termed amebic dysentery, and uncinariasis, are two diseases that were for a time thought to be natives alone of the tropics, but are now known to exist in various parts of our own land. Tropical dysentery, so termed, or amebiasis, is prevalent in this section, yet I have seen amebic infections that had at times no symptoms of dysentery whatsoever. If I can get this Association to draw a line through the center of this State north and south, and give me the doctors of eastern Arkansas with the microscope, the protoscope and the naked eye, I will present for you some better papers than I am capable of preparing for your next meeting on two subjects, perhaps, at least one subject, namely that of amebiasis, a subject which has never been brought before your Society before.

Now, then, I say this disease is indigenous to this climate and to this very section, and when I say so, I know whereof I speak. We know that Musgrave, Strong, Le Fleur, Osler and various authorities refer to this ameba and that ameba. The *entameba coli* is supposed by some authorities to be non-pathogenic in the healthy intestine, while the *entameba histolytica* is held by these same authorities to be pathogenic and the specific cause of amebic dysentery.

These two varieties are distinguished by certain morphological differences which I have not been able to discern. Let that be as it may, the point still remains, that amebiasis is a specific infectious disease; whether due to the *entameba coli* or the *entameba histolytica*, it is a disease and exists among you. Where enterocolitis, sigmoiditis or proctitis exists in one of your patients, get your microscope, examine your patient as you would for typhoid fever or tuberculosis, and find out what is the cause. Then, you will know how to treat your subject. I mention this because I want you to help study this disease.

The *entameba histolytica*, it is said, has a very delicate membrane covering and retaining the middle part of the cell or nucleus, whereas the ectoblast is very much harder than that of the ent-

*Address delivered in the Section on Medicine, at the Thirty-First Annual Session of the Arkansas Medical Society, held at Little Rock, May, 1907.

ameba cells, hence he can wedge in between the epithelial cells, get in beneath the epithelium into the sub-epithelial structures, there propagate and produce the disease. Let that be as it may. If it is *Entameba histolytica*, you have the *Entameba histolytica* here. I prefer, though to use the term *amebiasis*. When you make your examination with the microscope, you find these things, you have your bugs. So what is the result? *Amebiasis*, and yes, perhaps dysentery.

In the mortuary report of Memphis, this week, was reported the first case of amebic dysentery I ever heard of being reported, except by myself; a death from amebic dysentery. I object to the term, though I have used it, but it is *amebiasis*.

Here is a poor unfortunate that I had the good fortune of seeing (producing specimen of rectum) as I have a number of cases from your State. I have referred to nests in your State, nests here and nests yonder, and have referred to your water supply and your vegetables, and your rotten wood, and surface, or seep water. Get better water and you will have better health. I have referred to these nests at Crawfordsville, Jonesboro, Forrest City, Jelks Junction, Gray Station and Brinkley; all these sections have their nests all around them of *amebiasis*, from one to half dozen. I have had it come from each of those nests; wherever I find one, mark you, I make inquiry: What kind of water do you use? How many of your neighbors drink out of that same well? How many of your neighbors have dysentery, diarrhea or constant bellyache, or are sick all the time, abscesses of the liver and things like that? I invariably find there is a case right around them. Here is a poor unfortunate, as I started to say, that was brought into the hospital by two physicians in Memphis. A diagnosis of tuberculosis of the intestines was made agreed to by the two, a very reasonable conclusion but unfortunately for me they got me into it: I made my diagnosis clinically, positively clinically, of *amebiasis*—you can do the same thing—and not tuberculosis. Yet that man had a stricture. You hear men say that stricture is caused by syphilis in 95 per cent of cases; that is not true. Any invading organism that may produce an abrasion of the mucosa will give sooner or later a mixed infection, and that is where you get the stricture. In this case I will show you plainly that I am correct.

The amebic infection does not produce, however, the stricture, and that is demonstrated in this specimen here.

Now, mark you, when I examined that man he was in fairly robust health, just as you look at him; he was a man a good deal fatter than your chairman, I believe, at least as heavy; lying there in bed, getting up, sitting up, smoking his cigar

and reading his paper. My diagnosis was *amebiasis*, amebic dysentery, stricture of the rectum; prognosis unfavorable, possible abscesses in the liver; he had a little temperature. An autopsy was held two weeks later. Why, the man was sitting up at eleven o'clock in the morning, so his physician stated, reading his morning paper, and at one o'clock that day he was dead. The doctor refused to sign his death certificate unless he could obtain for himself a diagnosis; he was not satisfied that the man did not have tuberculosis. That was his statement to me, hence he got his autopsy. You can get yours, you can get a pathological specimen in that way. It is a privilege and a right you have, and a right our people have, that we may become more enlightened on such a subject.

In the splenic flexure of the colon, he resected this small section of gut. I did not put those holes in there, and the doctor did not. You see little background, there is no background there. Those are typical amebic ulcers going through all the coats of the intestines, whereas, below in the rectum you have an almost complete stricture. That, gentlemen, was your mixed infection, but it was originally *amebiasis*.

I present this subject to you, and this specimen, and would have you examine them if you like, at least this card. I presume you would not care very much to handle this rectum, but, as you see here it is almost completely closed. Here is the large caliber of the intestine, whereas, below you can scarcely make out the lumen of the intestine.

In closing I will state to you that you can make your diagnosis clinically. I do not want you to do it, but get your microscope, every country doctor ought to have a microscope.

I do not believe you have half as much bacillary dysentery in this section of the country as you do amebic dysentery. You can find your pathology in the rectum and in the sigmoid, and with a small proctoscope you can get in there and see the pathology of the disease in the gut. The ulcer and the circinate lines, are on the valves of Houston, if they are anywhere in that man's colon or rectum.

Suppose that man's gut was not strictured below, and you desired to treat him according to the most approved method, such as Osler, Hargrave, Strong and Le Fleur refer to, that of irrigation. I believe that irrigation does more than the quinine and the other things they use. I use formalin, and I believe that it is the best to use in the irrigation. But the principle is irrigation.

As I started to say, if that stricture was not there, what would the over-distension of the gut do? You would have a "busted" gut, and death, of course. And what is the danger of irrigation

with the ordinary tube that does not allow the exit of the water? I present here also the method that I have of irrigating the intestines with either hot or cold water, or varying the temperature, using just as much water as you want to, and not over-distending the gut.

I call your attention to this subject and to this method especially because I know many of you have Osler's work, and other works advising this treatment, which is the proper treatment, irrigation, and we are likely at some time to over-distend the gut. Please do not do that because it is dangerous.

Gentlemen of the Society, I thank you, and wish that I had an hour to talk to you, but I have not, and I do not want to take up your time.

SEBORRHOEIC DERMATITIS.*

By J. T. Clegg, M. D., Siloam Springs.

My attention has only been recently called to the frequency of this affection in all classes of patients seen in general practice. Many cases are of so trifling a nature that the attention of the practitioner is not called to them, while others resemble eczema so closely that they are mistaken for that common disease and treated as such with failure to cure so often that it has with many people a reputation of being incurable. It is my object and purpose to try to outline a few points of diagnosis between the so-called seborrhoides, or seborrhoeic inflammation of the skin, and chronic eczema which at times is quite impossible, not on account of the fact of the close resemblance of the two diseases, but on account of eczema being so frequently engrafted upon, and co-existing with the seborrhoeic infection.

Eczema is a catarrhal condition of the skin, while seborrhea is a disorder of the fat-producing glands, an increase, decrease, or alteration of the secretion in some of either the sweat or sebaceous glands. In some of its various forms it is a most common condition, especially in regions where oil glands are most abundant, as in the scalp, upper parts of the face, chest and finger nails. In the scalp in its simplest form it is shown as dandruff. It is probable that every seborrheal inflammation of the skin has its origin primarily on the scalp. Acne vulgaris is an inflammation of the sebaceous gland itself and is not to be classified in this form of dermatitis.

Seborrhoeal dermatitis is a scaly or lichenous condition of the skin which is most often found on the scalp and upper portions of the face, and is due, according to Unna, to an inflammation of the sweat glands. The sweat glands, according

to this authority, are the chief lubricators of the skin. At all events the disorder is due to a disease of the oil secreting glands and is of parasitic origin. It appears as a scaly patch of varying size and shape which, as the disease proceeds, assumes a reddened base. As the epidermal scales become less and less protective to the skin other microbic action develops, and a true inflammation may occur, resulting in a true eczema, or possibly a pus-forming infection may follow.

A seborrhoeide may be differentiated from other diseases by its primary branny or scaly appearance; occurring in patches; differing in form and location from psoriasis, though I have mistaken a psoriasis of the scalp for it. In psoriasis the scales are soft and greasy; the surface left by scraping them off is smooth and shiny. From exfoliative dermatitis or pityriasis rubra, by the more extensive scaling and more decided inflammation in the latter affection. From eczema, by the primary itching, vesiculation and weeping of the surface. In all cases of eczema there is weeping of the surface following vesiculation of more or less extent. The scale of chronic eczema instead of being epidermal tissue, as in seborrhoea, is the dried secretion of the inflamed skin. Eczema causes an infiltration and thickening of the skin; seborrhoeic dermatitis an exfoliation and thinning. Seborrhoea is dry; eczema moist. Seborrhoea may present a lichenous appearance where the epidermis thickens and accumulates on the surface instead of exfoliating. The two types may sometimes be seen in the same patient. Seborrhoea is essentially chronic and may exist for years without causing more discomfort than a rough, branny skin in patches about the edges of the hair, neck, or chest. Yet it may involve large areas of the body surface, as well as to destroy the hair or nails. At all times, however, seborrheal affections of the skin are associated with seborrhoea capitis, or dandruff.

The treatment is simple in the absence of complications, but it must be persisted in. Any non-irritating parasiticide is effective if properly applied. The scalp in every case must be treated. It is well to have the scalp thoroughly cleaned once a week with tincture of green soap, then apply daily a one per cent solution of resorcin in dilute alcohol. Eczema and other complications must be treated according to indications present.

DISCUSSION.

Dr. Leonidas Kirby, Harrison, called attention to one point in the diagnosis which he had often observed but which Dr. Clegg failed to mention, and that was a blood point immediately beneath the scales. The presence of this blood point is a valuable aid in distinguishing psoriasis from allied

*Read in the Section on Practice of Medicine of the Arkansas Medical Society, at the Thirty-First Session, Little Rock, May, 1907.

skin affections. He had not heretofore believed the disease had its origin on the scalp but admitted that the scalp required treatment in nearly all cases. The treatment as outlined was clear and satisfactory.

Dr. Clegg in closing the discussion said that he had not observed the blood point as mentioned by Dr. Kirby, but thanked him for calling his attention to it.

SARCOMA OF ILEO-CECUM.*

By T. E. Rhines, M. D., Thornton.

On December 4th, 1906, I was called to see a female child, two and one-half years old, which the mother said had been slightly ill for three or four weeks prior to my visit. Her temperature was normal; pulse 120, and weak; respirations 30 per minute, panting and labored. She was fretful and restless, sleeping but a few minutes at a time. Appetite good; no nausea; bowels regular. Abdomen intensely swollen, but tender only on very deep pressure. Region over stomach was tympanitic, but over remainder of abdomen the percussion note was between tympanitic and flatness due to ascites. Kidneys acted normally; no albumen; specific gravity 1016; some edema of ankles. Had the characteristic yellow hue and anemia of malignant growths.

On further examination of abdomen a tumor about one-half to three-fourth inches in diameter and six or eight inches long could be easily mapped out to the right and partly encircling the umbilicus, in half-moon shape.

The above symptoms remained the same, except that the tumor began to grow rapidly and became less mobile, until about ten days before death, when all symptoms grew severe; abdomen more distended, tender and painful; breathing more difficult; very restless; slight fever; pulse faster and weaker; loss of appetite; nausea; a greenish diarrhoea. At no time was there any blood in stools. Patient died January 6, 1907. Post mortem findings: Intestines were greatly distended with gas; a considerable amount of a yellowish fluid; omentum and peritoneum were inflamed, and intestines a mass of adhesions. Cecum was gangrenous and a portion of it with appendix had sloughed off; no pus. A tumor was observed situated at the ileo-cecal junction, about one or more inches in thickness, extending along the mesenteric portion of both ileum and colon for six or eight inches; then gradually tapering off each intestine for twelve or fifteen inches more, involving three feet or more of intestines. It affected only the mesenteric portion of the intestine, the

lumen was not obstructed; no ulceration. The tumor was very firm, as much so as a fibroid. I could not find but two cases of sarcoma of ileo-cecum reported, showing this to be a rare condition in this location.

THE USE OF ADRENALIN DURING ETHER ANESTHESIA.

Charles S. Venable, M. D., Charlottesville, Va.

From the Virginia Medical Semi-Monthly, February 22, 1907.

Recognizing that my experience in the use of Adrenalin during ether anesthesia is but very limited, covering a course of only eighteen cases, and knowing the many fallacies attendant upon too early conclusions, I feel a great hesitancy in making this report. However, owing to the uniform result that has attended its use, I am prompted to do so now.

I found that 25 per cent aqueous solution of the standard 1 in 1,000 gave the best results, and that by first pouring ether in the towel cone and spraying the Adrenalin solution on it, depending on the ether to vaporize it sufficiently for inhalation, was the best mode of administration. Three to six minute intervals are sufficient for its use and a total of from one-half to one ounce of this solution is enough for an operation lasting from thirty minutes to an hour. The effects are a more uniform etherization, the pulse becoming steadier, slower and of better character more rapidly than under ether alone; respirations are quiet and regular, the bronchial secretions are practically checked, and the progress of the operation is not interrupted.

These cases were not selected, and among them were old alcoholics; two women over sixty, one of them nearly eighty years of age. Three were very long tedious operations, lasting over two hours, and in none of the series was any stimulation required during the anesthesia.

Recovery from the anesthetic was uniformly good; there was practically no post-operative shock, and no stimulation was needed in any one of the cases; only two patients vomited at all and very little nausea was complained of.

From the foregoing facts I conclude that owing to the contraction of the smaller vesicles the bronchial glands secrete less mucus, and there is better aeration in the bronchioles and pulmonary vesicles, less ether is required to produce anesthesia and there is less probability of ether pneumonia following. The Adrenalin, acting generally from absorption, is a powerful stimulant; it materially lessens shock, lessens the capillary ooze at the field of operation, and is of great benefit to the much weakened patient. * * *

*Read in the Section on Surgery, at the Thirty-First Annual Session of the Arkansas Medical Society, held at Little Rock, May, 1907.

THE MEDICAL ASSOCIATION OF THE
SOUTHWEST.

The second annual meeting of the Medical Association of the Southwest, will be held at Hot Springs, October —, 1907. Dr. C. M. Rosser, of Dallas, Texas, president; Dr. F. H. Clark, El Reno, I. T. secretary. The program for this meeting is printed elsewhere in this issue, and from all indications this promises to be a great meeting, not only in attendance but from the standpoint of scientific interest. This society launched just one year ago, now officially recognized by the American Medical Association, is destined to become a great and important factor in medical organization and development in the Southwest, and every member of the Arkansas Medical Society should endeavor to attend.

THE ROSY SIDE—There is a rosy side to the professional life of the medical practitioner, in spite of quacks and quackery, of anti-vaccinators and anti-vivisectionalists, of bad debts, of harrassing work, of hospital competition, and of the score of other rocks and shoals that strew the sea of practice. The profession is honorable and intellectual; it is one becoming the traditions and the character of a gentleman; it is humane, charitable, it is progressive, it is intellectual, and, above all other callings in life, it is essentially human. Well may the line of Terence—*Homo sum, humani nil a me alienum puto*—be adopted by the liberal-minded and zealous practitioner of medicine. Yet must he follow his ideal with no divided affections. The work of his profession must be his life work—to be pursued with whole-hearted devotion to the last day of his life. Nor is the chance denied to the most remote and humble follower of medicine of contributing some fresh discovery or observation of value to the sum total of medical achievement. We have but to remind ourselves

that some of the great things in medicine have come from country practitioners.—Medical Press and Circular.

THE FINANCIAL ASPECT OF PRACTICE—There is a financial side of the picture, the neglect of which will sooner or later spell ruin to the most ardent enthusiast in scientific work, unless, indeed, he is fortunate enough to be in possession of an independent income. The student can afford to follow science for science's sake; the practitioner, on the other hand, has to practice art for something more than art's sake. It is all very well for medical men, who, by the way, are usually those in possession of a comfortable income, to deplore the spread of trade-union ideas and to deprecate the commercial spirit amongst their medical brethren. There is nothing dishonorable in taking a proper collective care of the financial factors of the situation, which have, unfortunately, in the past been often disregarded, with most disastrous results. It is not as if the State in conferring the right to practice the healing art upon properly qualified men had taken care to protect them against the inroads of unqualified pretenders. Members of Parliament are far too apt to consider that the State has granted an enormously valuable monopoly to the profession and is entitled in return to exact as much gratuitous service as can be wrung from the profession. The more precise statement of the situation is that the State has imposed certain restrictions upon medical men so as to ensure a proper supply of skilled practitioners in the interests of the public. By permitting the competition of a whole host of quacks and patent medicine vendors the State has betrayed the medical profession and abandoned with cynical shamelessness the wholesome principle of the protection of the public safety.—Medical Press and Circular.

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the State, changes of location, etc., are requested.

REMITTANCES.

Remittances should be made by check, draft, registered letter, money or express. Currency should not be sent, unless registered. Stamps in amounts under one dollar are acceptable.

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CHANGE OF ADDRESS.

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In order to lessen liability of errors, contributions should be typewritten.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

THIS NUMBER CONTAINS A LIST OF OFFICERS OF THE COMPONENT SOCIETIES OF ARKANSAS, THE ARKANSAS MEDICAL SOCIETY AND THE AMERICAN MEDICAL ASSOCIATION.

Editorials

NEEDS FOR A GREATER THERAPY.

The ethical part of the medical profession has neglected the highest duties of its calling in the recent past, and in so doing, has allowed quackery to thrive more abundantly than it might have done in many parts of this country. However, the unscrupulous will always find green fields and abundant opportunities for work in their various specialties. The reasons for these conditions are apparent.

The laity have in all ages ascribed a certain virtue to drugs for the alleviation and cure of disease which of course, does not properly belong to them. The profession at large has in a practical sense winked at this credulity and after drug therapy of the various sects have been tried in the balance and found wanting, the layman naturally turns to other forms of therapeutic endeavor advertised by irregular practitioners in the daily press or otherwise. Relief is often had and cure too, follows. Many physicians are wrecked here upon the shoals of ethics and bigotry. This lay experience naturally discredits the time honored medical profession and tends to raise the standard of quackish methods.

We wonder at the dense ignorance of the lay mind at times, but when we compare it to the want of consistency of many medical men we can readily see that there is not such great disproportions after all. This lack of balance on the part of the medical profession is directly responsible for the loss of faith by the laity and the marvelous growth of quackery.

It is not too late, but quite time our noble profession should redeem itself before the public. The lay mind should be taught, and not be compelled by experience to learn that drug therapy constitutes only a small part of the resources of the great and attractive field of the healing art; but that, heat, water, electricity, massage, or if you please osteopathy, physical culture, climatic change and all the forms of mechanical therapy are often times more efficacious.

Strange to say that in too many instances these measures have been prostituted by the

quack for monetary reasons, and neglected by many honest medical men, till forced to their duty by their successful irregular rival. These forms of therapy, prostituted by those of unclean hands, and neglected by those whose duty and right it is to know about them and use them for legitimate purposes, are each and all quite as valuable and belong as properly to medicine and medical practice as drugs themselves. It is a notorious fact greatly to be deplored, that many of these useful methods of therapeutics, exclusive of drugs, should have been neglected in a measure by the ethical part of the profession, and should have been largely employed by irregular advertising practitioners.

Every honest doctor recognizes the merit of many forms of cure or treatment of disease, and although he does not directly employ them, if he be true to his profession, he will see to it that his patient is properly used by other doctors who can offer other means of cure. The moral is self-evident. The organized or ethical part of the profession, who have in the past neglected these valuable methods of therapy, aside from drugs, must prepare either to give a greater therapy to their clientele or else direct them in legitimate and reliable channels for relief. The medical profession will continue to fall short of its highest mission in this world until it enlarges its field of usefulness and eliminates selfishness and ignorance as far as human nature will permit. Selfishness is only a form of ignorance and as a rule the most selfish man in the profession is the most ignorant—ignorant of everything therapeutically that he does not understand and use in the treatment of disease. I am aware that no amount of education and opportunity will make a gentleman and honorable physician of one who is bent otherwise, but a closer observance of a few of the points referred to above will make for good in a general way and will elevate the profession. Selfishness and ignorance cause a physician so endowed to wrongfully use many patients and prevent their getting the best treatment somewhere among a list of competitors. Such methods are shameful, and the glory of the profession is darkened by this blight to which we have just alluded. Let us

have a greater and more useful therapy based upon a wider education for the ethical part of our profession and we shall see irregular practitioners and irregular methods vanish because of professional as well as lay enlightenment.

W. C. Dunaway, M. D.

THE UNDERGRADUATE.

"Am I my brother's keeper?" Genesis, 4:9.

It is perhaps none too early to begin discussion of two proposed amendments to the By-Laws introduced in the House of Delegates at the last annual meeting of the State Society which will come up for adoption or rejection next May. Both are proposed in the interest of the undergraduate, but as each has strong points of difference, their careful perusal is advised before any decided opinions are formed concerning their relative strength or weakness.

The Jelks amendment if adopted, will confer eligibility for membership—without restrictions—upon all licensed undergraduates who are now legally registered in this State, or who may be registered in advance of the next meeting of the State Society in 1908; after that date, eligibility will be based upon evidences of graduation from a reputable medical college requiring not less than a four years' graded course.

The Young amendment will permit the undergraduate "provided he possesses all the other qualifications for membership," to join only the county society, but he will be denied the privilege to vote, hold office or become a member of the State Society.

To those who believe the undergraduate is by all just rights entitled to full and unrestricted membership in the county and State Societies, neither amendment will be acceptable; while those who tenaciously adhere to the belief that the membership of a medical society should be strictly limited to those who, as a reward for collegiate work and training, are possessed of the honorable degree of Doctor of Medicine, will vote to reject both.

There is one question that seems to be vital to this controversy and which must be answered before a broad and proper conception can be had of it, and that is "Has the undergraduate

any inherent, acquired, or even *quasi* rights in, or claims upon, organized medicine?" If answered affirmatively, then the additional interrogatory arises, "What is the character of these rights or claims, and to what extent should they be respected?"

The undergraduate is clamoring for admission to the county and State Societies, and it is the duty of those who espouse his cause to show good and sufficient reason why he should be admitted. Conversely, there are those who will resist every attempt to amend the present law, and they too are expected to show cause why the adoption of either amendment would be bad policy.

This subject will be discussed in the October number by Drs. F. W. Jelks, of Hot Springs; Dr. F. T. Young, of Springdale; Dr. Leonidas Kirby, of Harrison and Dr. J. P. Runyan, of Little Rock.

PROPOSED AMENDMENTS TO THE BY-LAWS.

JELKS AMENDMENT

Resolved, That all undergraduates who are now recognized as legal practitioners of medicine in the State of Arkansas, are eligible to membership in this Society. That after the meeting of this Society in 1908, every candidate for membership in a county society shall be required to present evidences of graduation from a reputable medical college requiring a four years graded course.

YOUNG AMENDMENT

Chap. IX, Sec. V. Each county Society shall judge of the qualifications of its own members, but as such societies are the only portals to this Society and to the American Medical Association, every reputable and legally registered physician who is a graduate of a reputable medical college and who does not claim to practice, nor lend support to any system of medicine, shall be eligible to membership.

Amendment—Nongraduates who possess all the other qualifications of membership, may be admitted to associate membership in county societies. Such members shall not be entitled to vote or hold office nor to become members of the State Society, but shall be entitled to all the other rights and privileges of membership in county societies.

PURPOSES OF THE ARKANSAS MEDICAL SOCIETY.

"The purposes of this Society shall be to federate and bring into one compact organization the entire medical profession of the State of Arkansas, and to unite with similar societies of other states to form the American Medical Association;

to extend medical knowledge and advance medical science; to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life."—*Art. II of the Constitution.*

Department of Medicine

By Henry Thibault, M. D., Scott.

LATENT MALARIA—Craig (Jour. Infect. Dis. 1907, V. 108) gives a careful blood study of what he terms latent and recurrent malarial infections. He designates as "latent" those cases where the parasites are present in the blood and have never given rise to any marked symptoms of malaria; and as "recurrent", those cases where chills and fevers have occurred and have been apparently cured, but the blood continues to contain, for a long time, the parasites that caused the first attack.

He believes that intracorpuseular conjugation is probably the process intended to maintain the malarial infection in the blood of man; it occurs whenever the races of plasmodia are in danger of dying out from repeated sporulation in the usual manner.

His conclusions are (1) Intracorpuseular conjugation is the chief cause of the maintenance of malarial infection. (2) It maintains the infection by producing a resting or zygote stage of the plasmodia within the body which are resistant to quinine and other injurious influences. (3) It (intracorpuseular conjugation) is the cause of latency and recurrence, the zygote state remaining until conditions are favorable when it gives birth to the young plasmodia, thus causing a recurrence of the symptoms. (Abstracted from Am. Jour. of Med. Sciences.)

These studies are of particular importance in showing how the infection of a community may be maintained. Two or three of these resting periods can easily keep the infection in the patient's blood through the winter. The first time he is depressed by exhaustion or spring onions the recurrence takes place, and he begins to infect the mosquitoes, they pass it on to other human beings and in a few months our summer supply of malaria is at its height.

It has never been demonstrated that a mosquito can carry an infection (in its own body) through the winter. That anopheles hibernate in the adult phase, and are often active in winter, has been generally known ever since our attention was first called to them as carriers of malaria; but no one has yet definitely settled the question as to the length of time they live after becoming infected, or how long they are in discharging all their parasites after rupture of the sporocysts, but the indications are that the mosquito can infect for only a few weeks at the very most, and it is quite improbable that they carry any infections over winter. This lends added importance to Craig's work, as it eliminates all except the human host from the carrying over process. The patients with latent or recurrent infections then become important factors in perpetuating malaria, and again is impressed on us the necessity of isolating continuously from mosquitoes the patients with occasional chills. If we ever succeed in eliminating malaria from Arkansas, a state literally overflowing with breeding places for mosquitoes, it is more than probable that it will have to be done by protecting mosquitoes from infection by the man, as well as by destroying the mosquitoes and their breeding places.

FREAKS OF ELECTRIC CURRENTS—Under such headings we often see where some one is killed while telephoning and turning on an electric light or fan at the same time; or, more generally speaking, while in simultaneous contact with a powerful and a very weak current—each supposed to be entirely insulated from the other. The lay press speaks of these accidents as unexplained freaks, and we make

no comment because the lay press is ever seeking unexplained mysteries; but when highly educated and eminent editors of medical publications in speaking of such accidents begin to talk of the "wonderful mysteries of the electrical current," and attempt to make a ghost story out of a simple physical phenomenon, then it is time to call a halt.

There is enough undiscovered truth in the world without going to the trouble of making "mares nests" of things that are generally understood. Such an attitude is especially unbecoming in medical writers when it serves to cover up real facts and to protect from censure or legal punishment those who are really culpable.

Since no less than two fatal accidents of this kind have occurred in Arkansas in the last few years, it may prove of interest to physicians and to the users of electricity to know their real physical cause.

A. Elliot Paine, medical examiner, Boston, Mass., reports (Boston Medical and Surgeon Journal, CLV, 741) the following case: A gentleman called up his home by telephone, and in the act of hanging up the receiver, touched an electric bulb with the other hand. There was a flash and he was killed instantly. Marks on his body and the telephone showed that a powerful current had passed from the light through him to the telephone. The telephone current was four volts. The light current (main wire) was 3,500 volts. Instead of trying to explain this by mythical reasoning, as to the difference of potential and voltage of the two currents, etc., a careful examination of the entire length of the two circuits was made and the explanation found. Some distance from the office where the accident occurred, the electric light wire crossed the telephone wires. The friction caused by the swaying of the wires had worn through the insulation. The accident was caused by a simple short-circuiting of the 3500 volt current through the telephone. Similar careful inspection will reveal the true cause of all such accidents and lead to measures of prevention.

**Department of Ophthalmology,
Otology, Rhinology and
Pharyngology**

By R. H. T. Mann, M. D., Texarkana, Ark.-Tex.

EYE STRAIN AS A FACTOR IN THE PRODUCTION OF HEADACHE—General practitioners do not fully realize, as a class, the importance of eye strain as a factor in the production of headache. Especially is this so in the headache of young people. A few years ago I made an investigation of a large number of patients who consulted me for errors of refraction, and who also were sufferers from headache. From inquiries of these patients it was learned that 57 per cent of all headaches were given complete relief by the use of glasses, and that 23 per cent were given partial relief. In the examinations made for this class of patients it is absolutely essential to use a mydriatic and thoroughly paralyze the accommodation. Many patients who are sufferers from headache due wholly to eye strain will be found whose vision without the use of a mydriatic is normal or better. It is wholly useless to refer this class of patients to a jeweler or an optician in the hope that they may thus be relieved—one might as well refer a case of appendicitis to a druggist rather than to a surgeon. It is remarkable to note sometimes the slight error of refraction which is capable of producing a most violent headache. I recall now a lady who spent a large part of her time in bed, prostrated from most violent headache, which a plus 0.50 spherical lens (a very weak lens) completely relieved. When we come to realize that headache is not a disease within itself, but the symptom of a disease, we will then be in a better position to locate its cause and permanently relieve the patient, rather than trusting to the temporary relief obtained from drugs.

SOLUTIONS OF ATROPINE should be instilled into the eyes of patients past middle life with a great deal of caution. While it is doubtful if atropine per se produces an increase of tension in an eye, yet in eyes predisposed to glaucoma it may bring on an attack which sometimes results in complete blindness.

DISEASES OF THE ACCESSORY SINUS—The recent discoveries made in rhinology have clearly demonstrated the fact that the accessory sinuses of the nose are more frequently the seat of diseases than had hitherto been supposed. Many patients are being cured by radical operations on these sinuses who had before these discoveries been sufferers from supposedly incurable diseases.

ADENOIDS—It has now been nearly fifty years since Czermak first saw a glandular enlargement in the vault of the pharynx commonly known now as adenoids, and it was in 1870 that Meyer, of Copenhagen, published his classical article on the results of his investigation upon this glandular growth. The deleterious effect of this growth was not fully understood by clinicians at that time, nor is it fully appreciated by many practitioners of the present day. The removal of this growth very often converts a dull, poorly nourished, despondent child into a bright, happy, healthy and robust child. The hearing is very often impaired by this growth. In fact, it is the most frequent cause of deafness in children. Treatment of the ears without its removal is useless. There is not another operation in the field of surgery which, with the removal of the tonsils when they are hypertrophied, gives more brilliant results than this one. It is an operation which has not been thoroughly performed by many practitioners who have attempted it, and for this reason the results in those cases have not been at all satisfactory. In doing this operation on children, it is no doubt best to use a general anesthetic, and with the patient's head hanging over the end of an operating table so that the blood cannot enter the larynx, the hypertrophied tonsils are first removed with a tonsillotome and afterwards the adenoids are thoroughly removed with adenoid forceps and a curette. The finger should always be passed into the vault of the pharynx to see that the growth has been thoroughly removed, and if it has not, it should be without further delay.

TONSILLOTOMY—In removing the tonsils in an adult where there is much danger of hemorrhage, the cold wire snare is far preferable to a

tonsillotome and should always be used for that reason.

DIPHTHERIA—Is it possible to clinically diagnose diphtheria? During the past winter I made it a routine practice to have cultures made in all cases of inflammation of the throat which at all resembled diphtheria. I saw in consultation six of these cases. In some of these patients antitoxin had already been used, not that the diagnosis had been clearly established that it was diphtheria, but that they were suspicious cases at least, and therefore antitoxin should be used. This is indeed a most excellent rule to follow. But should whole families be quarantined, schools closed and all the other disadvantages incurred which are caused by quarantine, without first having a culture made? In the six cases seen, and some of them were of a severe type, Klebs-Loeffler bacilli were found in only one case. This case of all others seemed to most resemble follicular tonsillitis. One other case had a slight palsy of the soft palate and no doubt this case was diphtheria. I believe in this case the culture was not properly secured. There was no spread of the disease nor were there any fatalities.

I believe that in every case of suspected diphtheria, if for any reason a culture cannot be made, that antitoxin should be used. But certainly every practitioner in Arkansas is now close enough to a competent bacteriologist to have cultures made before establishing rigid quarantines.

Communications

REMOTE DANGERS OF PARAFFIN PROSTHESIS.

Hot Springs, Ark., Aug. 30, 1907.

To the Editor:

In the Journal A. M. A., May 18, 1907, appeared an article calling attention to the remote dangers of paraffin injections for the correction of nasal deformity, especially of the

"saddle-back" type. Since the publication of that report I have observed and treated a case with a similar history and probably a more serious result.

The patient was sixty-seven years of age and had been in good health all his life. About three years ago a very prominent surgeon injected paraffin to correct some nasal deformity. The results were so gratifying at the time that his picture was taken and exhibited in some of the leading journals.

The nose retained a fairly good shape for two years. Last August ulceration began in the center of the injection, which increased until June, when he came to Hot Springs. When he reached here the ulcer was about the size of a dime, and situated over the nasal spine of the frontal bone. There was a zone beyond the ulcer about the size of a half-dollar of connective tissue hyperplasia and dilated capillaries. The ulcer extended down to the bone. The septum and whole anterior portion of the nose had atrophied from the continuous pressure of the paraffin infiltration until it was less than one-quarter its natural size.

A nose in such a condition presented a most horrible spectacle, and had almost driven the patient to desperation. It would make any honest physician think twice before advising such dangerous surgery merely for cosmesis after looking upon such a sight.

The writer of the article referred to above, states that there is no treatment for the condition, but I beg not to give up too soon. The first thing done in this case was the removal of the paraffin, which had collected in masses, with a small curette, and the application of stimulating dressings. His age was a hindrance to giving strong alteratives internally, so deep muscular injections of increasing doses of soluble iodine were made into the gluteal region.

The results were very satisfactory to the patient. In fact, the ulcer healed and very nearly all the new growth of connective tissue was absorbed in about five weeks of constant treatment.

T. E. SANDERS, M. D.

A PLEA FOR REGISTERED PHARMACISTS.

Booneville, Ark., Sept. 3, 1907.

To the Editor:

Are lives any more valuable in the northern and eastern states than in the southern and western? By the way that some of the laws are enforced one would be led to believe so. The law requiring all the prescription clerks to be registered is one that is not enforced in many, if any, of the smaller towns of this state. This is the fault of four classes of people, but of these the doctor and the druggist have the bluntest of the blame to bear, and rightly so, for they, more than anyone else should see to it that the laws are enforced. It is the fault of the layman, because he does not demand that the druggist be qualified to attend to business. It is usually enough with him that there is a drug store, and he never stops to ask whether or not the druggist has prepared himself for this work. It is the fault of the druggist because he does not demand that his clerk know his business, and instead of asking to see his diploma from a good school, and his certificate from the State Board, he usually asks what wages he demands. It is the fault of the physician because he will send his prescriptions to the druggist regardless of his qualifications, or more properly speaking, his lack of qualification. And last, but by no means least, it is the fault of the State officials, for they will not try to enforce the laws that we now have.

In the cities the druggist would not think of employing a prescription clerk who was not registered, while the same man will send an unregistered clerk to a smaller town to take charge of a drug shop that he may have there. Are the lives of the patients in the city worth so much more than the lives of the patients in the smaller towns? Are the physicians in the city so far ahead of the physicians in the smaller towns that it takes a trained man to fill their prescriptions, while any old farmer in the country can fill the prescriptions for the country doctor?

It is the duty of every physician to urge the enforcement of this law, and demand that the druggist who fills his prescriptions be qualified for his work. Instead of this, many of us know doctors who are interested in drug stores and employ clerks to do the prescription work who have never attended any school of pharmacy and have not tried to prepare themselves by home study. And those same doctors would "kick like blue blazes" if another unregistered druggist in the same town made a mistake on one of their prescriptions, and maybe poison the patient.

The popular impression is that it takes no skill and not much common sense to mix drugs; that chemistry is a waste of time, and attending a school to prepare for this work a useless expenditure of time, money and gray matter. What is the necessity of one boy going to school when his next door neighbor is a prescription clerk at a fairly good salary, and *he* did not go to school? Began as an errand boy and one morning when the regular prescription clerk failed to show up, was promoted.

The State Board of Pharmacy of Illinois demands that an applicant for examination shall have had four years' experience and be a graduate of a reputable college. There is a good pattern for any state to follow. We have a fairly good law on the registration of pharmacists, but the way it is enforced, or, more properly speaking, the way it is not enforced, is the joke of the schools and students of the northern states. You do not have to go far north to hear the joke either. Many druggists do not pretend to be registered or to conform to the law in any manner. Others have a physician to office in the store, they seem to think that such action makes them immune from the law; others borrow certificates from a friend. I know of one drug store which has a certificate that has not been renewed in years (it belongs to a friend who is no longer in the business), and is so hung that the name is obscured by some decoration.

We all know that prescriptions sent to the majority of the drug stores in the smaller towns are as liable to have one thing put in them as another, and that in case a mistake is made,

the patient usually blames the physician with it, and usually does not hesitate to tell his neighbors about it. We can readily see how a few mistakes will soon hurt the doctor, and will lower the confidence of the people in all the doctors, for in this profession as in a great many others, the doctors as a class are too often judged by one man, and if he is good all are good, but if he is bad all are bad. There is a remedy for this condition, and it seems to be up to the doctor to put it in force. We howled about the insurance fee until many of the companies restored it to \$5.00. Is a "measly" little fee of \$5.00 worth more to the doctor than a good druggist? Why then do we not pass resolutions in the county societies demanding that the druggist be qualified to do his work? We demand that the physician be prepared for his life work, be examined and licensed by the Board for that purpose, and should any unlicensed man locate in our district we would demand of him that he conform to the laws the same as we. We demand that the dentist be licensed, and most of us refuse to send our patients to one who is not, but we will turn around in less than five minutes and send a prescription to a druggist who knows no more about drugs than the patient. And then we howl because the drug did not have the desired effect, and we promulgate some new treatment. How do we know that we got the medicine prescribed if the druggist does not know his Latin, and half the drugs are labeled in plain English.

We cannot afford to carry a drug store around with us, and the average physician's office is not large enough to carry the necessary stock of drugs, but in case it was, we do not care to spend half of our time mixing our own medicines, besides all this, most of us have not the required capital to lay in a stock of drugs. Unless we have competent pharmacists we shall be compelled to make some kind of arrangements to furnish our patients with the medicines they need. The doctors as a class are strong enough to have some influence with the state officials, and if we demand that they enforce this law, they will at least make some pretense of doing so. Recently while talking with a candidate for the office of prosecuting

attorney, I told him if he would enforce this law I would vote for him. He was very much surprised that I made such a request, and said the law had never been enforced, but promised if elected to make the attempt. He is the man that will get my vote, for if he will enforce this law which has been dead so long, I do not fear that he will fail to enforce all the others.

The advantage of registered pharmacists is not only an advantage to the physicians, but to the druggists, for it puts their business on a higher plane. It is also a great advantage to every man, woman and child in the State, for it makes them practically sure that they will get what the doctor prescribes.

One physician can not have this law enforced; it will take the concerted action of all the physicians in the State, and it may be a long and strong fight, but there is only one way to get it, and that way is to go after it and stay after it until we get it.

S. P. McCONNELL, M. D.

APPOINTMENT OF DR. J. C. WALLIS ON THE STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY.

CORRESPONDENCE BETWEEN DR. STEPHENSON
AND THE ACTING GOVERNOR.

To the Editor:

Believing the enclosed correspondence which occurred between Acting Governor Pindall and myself, concerning the appointment of a member to fill the vacancy caused by the resignation of Dr. J. W. Meek, will be of special interest to the members of the Arkansas Medical Society, I respectfully submit the same for publication in the Journal:

Little Rock, Ark., July 30, 1907.

Hon X. O. Pindall,
Acting Governor,
Little Rock.

My Dear Sir:

I notice in the newspapers that Dr. J. W. Meek, a member of the State Board of Medical

Examiners of the Arkansas Medical Society, from the Seventh Congressional District, has tendered to you his resignation, and that you have accepted same and appointed in his place to fill his unexpired term, Dr. R. A. Hilton, of ElDorado.

As president of the Arkansas Medical Society, I beg to inform you that it occurs to me you have not made this appointment according to law, thus ignoring the list supplied the governor by the Arkansas Medical Society, which list this appointment should be made from. No one objects to the appointment of Dr. Hilton, but the Arkansas Medical Society has supplied a list of names to the Governor according to law, and as this list is for this purpose it appears that Dr. Hilton cannot be lawfully appointed inasmuch as his name does not appear on the certified list sent to the Governor by the Secretary of the Arkansas Medical Society. I therefore beg that you recall the appointment of Dr. Hilton, and select from the list of names as furnished by the secretary of the Arkansas Medical Society.

If you will refer to Sec. I, of "An Act to Regulate the Practice of Medicine and Surgery, and for the Appointment of Three Boards of State Medical Examiners, and Defining their Duties," you will observe that the latter clause of this section provides that, "the appointment shall be made from a list of names presented by the respective Medical Societies." Sec. 2, provides, "That vacancies in the said Boards shall be filled as they occur by appointments from lists furnished as provided."

For your information, I beg to herewith supply the names of the parties as supplied to the Governor by the Arkansas Medical Society,

For the Seventh Congressional District:

Dr. J. C. Wallis, of Clark county.

Dr. J. W. Meek, of Ouachita county.

Dr. H. J. F. Garrett, of Hempstead county.

Trusting that you will overlook any seeming presumptuousness on my part, I beg to assure you of my continued good will and highest esteem, and with my kindest regards, I am,

Yours truly,

C. C. STEPHENSON, M. D.,
President Arkansas Medical Society.

Little Rock, Ark., July 31, 1907.

Dr. C. C. Stephenson,
City.

Dear Sir:

I am in receipt of your letter of recent date in regard to the appointment of a member of the Medical Examiners of the Arkansas Medical Society for the Seventh Congressional District, to fill the vacancy caused by the resignation of Dr. Meek, and in reply I beg to advise you that I will be out of the city for the remainder of this week, but upon my return to the office I will be glad to look into this matter with the view of conforming to your request.

Assuring you of my best wishes, I am,

Very truly yours,

X. O. PINDALL,

Acting Governor,

Little Rock, Ark., August 1, 1907.

Dr. J. C. Wallis,

Arkadelphia, Ark.

My dear Doctor Wallis:

I presume that you have noticed in the newspapers that the Governor has appointed Dr. R. A. Hilton, of El Dorado, as a member of the State Board of Medical Examiners of the Arkansas Medical Society, in place of Dr. J. W. Meek, of Camden, who has resigned.

As President of the Arkansas Medical Society, I have written to the Governor, objecting to this appointment on the grounds that the appointment is not made according to law. The appointment should be made from a list supplied by the Society. On this list appears the names of Dr. J. C. Wallis, of Arkadelphia; Dr. J. W. Meek, of Camden; Dr. H. J. F. Garrett, of Hope.

It is clear that the Governor must either appoint yourself, or Dr. Garrett. I have this morning received a reply from him, and he informs me that he will be out of the city the balance of the week, and on his return, he will take the matter up to conform to my request. I am writing to Dr. Garrett, the same letter, and now I ask that you both write the Governor, and request him to conform to the list and the

law, and recall Dr. Hilton's appointment and appoint one of you gentlemen. This vacancy cannot be filled in any other way, and I conceive it to be my duty to see that the Society's interest do not suffer, hence I take the matter up.

With my kindest regards,

C. C. STEPHENSON, M. D.,
President Arkansas Medical Society.

Little Rock, Ark., August 13, 1907.

Hon X. O. Pindall,
Acting Governor,
Little Rock.

My dear Sir:

On July 30th, I had the honor of addressing you concerning the appointment of Dr. Hilton, of El Dorado, as a member of the State Medical Board of the Arkansas Medical Society, to succeed Dr. J. W. Meek, of Camden, resigned. In this communication I requested that you rescind this appointment, and appoint from the list of names supplied the Governor by the Society, which has been done according to law. On the 31st, you replied, stating that you would be out of the city the remainder of the week, but "on your return, that you would consider the matter so as to conform to my request."

Having received from you no further communication relative to the matter, I address you again to remind you I am receiving complaints from the membership of the State Society protesting against the appointment of Dr. Hilton.

Awaiting your advices, which I trust will be in accord with the law governing the matter, I am with renewed esteem,

Yours truly,
C. C. STEPHENSON, M. D.,
President Arkansas Medical Society.

Little Rock, Ark., August 14, 1907.

Dr. C. C. Stephenson,
Little Rock, Ark.

Dear Sir:

I am in receipt of your letter, together with others from members of the State Medical Society, protesting against the appointment of

Dr. Hilton, and in reply I beg to advise you that up to this time I have not had an opportunity to finally dispose of this matter, but write to assure you that some conclusion will be reached in regard to this appointment, by the latter part of next week. With continued friendship, I am,

Very truly yours,
X. O. PINDALL,
Acting Governor,

Little Rock, Ark., August 20, 1907.

Dr. C. C. Stephenson,
Little Rock, Ark.

Dear Doctor:

I write to advise you that Dr. R. A. Hilton has declined to accept the appointment on the Board of State Medical Examiners, and that I have this day acted in conformity with the law and appointed Dr. J. C. Wallis, of Arkadelphia, to fill vacancy now existing on said Board, and take pleasure in enclosing you his commission which you will please deliver to him.

Assuring you that it is a pleasure to conform to your wishes in this matter, I am,

Very truly yours,
X. O. PINDALL,
Acting Governor,

Little Rock, Ark., August 21, 1907.

Hon X. O. Pindall,
Acting Governor,
Little Rock.

My dear Sir:

I beg to acknowledge receipt of your letter, enclosing certificate of appointment of Dr. J. C. Wallis, as a member of the State Medical Board of the Arkansas Medical Society. I have transmitted the certificate to Dr. Wallis by to-day's mail.

Thanking you on behalf of the Society for the happy termination of this matter, and assuring you of my continued good will, I am with kindest regards,

Yours truly,
C. C. STEPHENSON, M. D.,
President Arkansas Medical Society.

SOME VIEWS CONCERNING MEDICAL
ORGANIZATION AS ENTERTAINED
BY AN EX-SECRETARY.*

C. C. Stephenson, M. D.,
President Arkansas Medical Society,
Little Rock.

In presenting these views to the Eighth District Medical Society, I might say, by way of introduction, that I do not propose to present anything new, but only reiterate a few things that all of you no doubt already know. Sometimes, however, more grain may be procured by threshing old straw over again. It may be well for us all to learn this lesson: that repetition is one of the best ways to retain a thing that we learn, so that it will be lasting and produce that indelible impress that will survive the ravages of time. The views concerning medical organization, of which I propose to speak, are those reflected by the membership, and are not peculiar to any one secretary; but all secretaries, no doubt, can indorse every word of this paper. Having served organized medicine several years, both in the capacity of county and state secretary, and having carried on the usual correspondence with our county secretaries, I feel that I am prepared to speak advisedly. Although I may not present a new idea, yet I can, in a measure, redress old ideas, giving them an authoritative garb. A medical organization does not stand for the same thing in the eyes of all of its members, and as I am an oculist, I will illustrate by using terms significantly used in my specialty.

The membership may be divided into three classes, as follows: Weak-sighted, near-sighted and far-sighted. All, however, view the organization through spectacles, of which no two are alike, all differing one from another in degree, character and quality, those worn by the secretary differing in these essentials, and in addition, differing in size.

One member of the society viewing the organization through his lenses may see it with a glass whose dioptré of strength is of such weak degree that he sees nothing in medical

organization, only the stationery of the society, consisting of a few letter heads and envelopes. This is about all he sees. To such an one, the beauties of medical organization will never appear beautiful, or be productive of practical results. Of this character of members we shall have nothing more to say, regarding them as being a burden, which the membership of a society has to carry. There is no law to turn them out. They are of that class against whom charges ought to be preferred at the first opportunity. You cannot coerce them into attending the meetings, and as a rule you cannot quell their talkativeness on the outside; so the result is, they are a hopeless appendage—caudal appendage to the Society, which can neither be used for service, nor ornamentation. Unless some one devises some means by which this class of medical men can be improved, they will remain a worthless asset to any medical society. They are already worthless to themselves, and are worthless as practitioners; so the only way to endure the bad bargain, is to be submissive and tolerate them, if no other way presents itself for a society house-cleaning.

Another class of members see through spectacles whose character may be regarded as the near-sighted kind. These fellows can never see anything in organized medicine unless brought face to face with conditions, either existing or which might exist, and perhaps, then, you may have to pound it into them. Still, when made to see, they are of a class that hold on tenaciously. They are those fellows who, when they know and feel that they know it, go in for all the good that is to be gotten out of a given proposition. This class should be encouraged. There is hope for them, and some day they may render organized medicine good service.

There is another class who see medical organization through far-sighted spectacles. They are the fellows who are always on the lookout for something good in medical organization, and try to better conditions which already exist; bring in new members, aid the secretary in his duties, encourage the president in his work. They are the fellows who never refuse to have a paper when called upon to read one. They are the fellows who attend society meetings, rain

*Read at a meeting of the Eighth District Medical Society, Dardanelle, August 26-27, 1907.

or shine. They perceive the good of medical organization to themselves and their clientele. No excuse is ever needed for this class of members. They are fully alive; they are the ones that make good. They are of the class that keep the medical society moving forward and upward. You may depend upon them for any kind of work at any time, and rest assured it will be done. These are the salt of the earth. Every society should show its appreciation for this class of members. However, not like the New Hampshire State Society whose secretary, after serving thirty-seven years faithfully and continuously, finally resigned his office, and the gratitude shown by his society consisted of a two-inch editorial squib in their State Journal!

The secretary views the Society through different glasses altogether, inasmuch as his glasses differ in size. His spectacles are of a class peculiar to his office and duties, comprising the other three varieties. At a glance he sees the fellow who wears the weak lenses and his shortcomings, and for whom he has no pity. He sees the near-sighted member in his affliction, and sympathizes with him and encourages him. He sees the far-sighted member, and receives from him encouragement to go ahead; and in addition to this, he sees, through his spectacles, the good that comes from medical organization in a way that no other member can. He is in a position to receive "tips" as it were; his glasses being large, give a big field of vision. These "tips" give him an insight concerning the motives that prompt many members to unite with the Society. Many physicians join the Medical Society from motives known only to themselves, however.

One might join from very good motives, while another might do so from purely mercenary motives, whereby he would expect to enrich his coffers. He joins with no other understanding except that it places him in a position whereby money comes to him more easily than by remaining on the outside. Another goes in for a selfish motive. This member cares nothing about the benefits to be derived from organized medicine, just so he attains the selfish ends that he may have in view. He may want his membership for another purpose; perhaps to

"toot his own horn" to his constituents, whereby he lets them know that he is a member of his County Society. This member is thereby placed on the level with the hard-worker—the man who toils to make the Society go.

Another class join from philanthropic motives. They unite for the good that comes to them through medical organization, whereby they may carry the results of its beneficent influences to suffering humanity. God bless these noble, self-sacrificing men! This class of members ought to, and undoubtedly will, receive a crown of rejoicing when professional labors are ended.

Medical Societies generally do not seem to grasp the entire work which organized medicine should perform. The political part of a doctor's life should be linked to that of organized medicine. In unity there is strength. Could we realize the truthfulness of this statement, there would be very little trouble in changing many bad conditions which now exist to entirely satisfactory ones.

It may be well to quote to you from the paper read by Dr. John A. Wyeth, of New York, at our last State Society meeting, which you will find printed in the JOURNAL OF THE ARKANSAS MEDICAL SOCIETY, May issue. He says:

"The value of medical organization is the influence it exerts on the body politic, and through this medium the proper legislation needed to better conditions should be secured; and we can only do this by intelligent co-operation and the sacrifice of much of our material interest to the public good. Organized medicine should take more note of politics. Representative men should be sent to State and National legislatures. We would do well in our efforts for the good of mankind to emulate the noble example of that great physician, great scientist, great philosopher, and withal, the great politician, the immortal Virchow."

This I commend to you for your consideration. Coming from so great a man as Dr. Wyeth, it is worthy of your earnest and careful thought. The secretary has a knowledge of the truthfulness of what Dr. Wyeth says, from the

fact that he is in position to know that in unity there is strength. He is in position to know that if medicine were as well organized as it should be, and the members did their full duty, the benefits to be derived by asking a legislature for a law would be quickly apparent when such request was made. Results would then follow our requests without any effort. It would not be necessary to send telegrams and mail letters urging the passage of such and such a bill.

The observations of the secretary however, concerning legislative matters in regard to medical organization, is exceedingly encouraging and at no distant day organized medicine may be consulted by the law-makers, and its opinions sought.

The secretary is often in receipt of inquiries asking for qualified physicians to make life insurance examinations. Whom shall he recommend in your county? Whom shall the county secretary recommend in his county? Shall he go outside of the Medical Society? To be sure, he would not be treating his members right were he to do this. Whom shall he select on the inside of the Society? Shall he select one who wears lenses of a weak degree? You answer, no. Shall he select the fellow who wears the near-sighted glasses? You say, no. He is not as well-fitted for this service. Then, there is only one class from which to choose: that is, the worker.

The moral, then, is, if we wish benefits, we must work for them. One of the honors to be derived in medical organization is station in the profession. The secretary sees the honors of the Society go to the worker.

There is nothing that can prevent the worker from getting them. Any worker is entitled to receive them, and he should have them. They belong to him by virtue of his perseverance. The secretary sees an increased practice go to the worker in the Medical Society. The time is past whereby the physician can take a pair of saddle-bags and for one moment think that all he has to do is to call himself a doctor, and that patients will fall over one another to secure his services. The man who wins out in the professional battle of today has to fight for

every inch of ground that he stands upon. And he must keep up the fight to maintain this standing room. Who is this man that wins out? It is the fellow who takes the lead in his Medical Society; the thinker, in fact. It is the fellow who keeps up with medical organization in all of its phases. The fellow who does his best all the time, never faltering, uncomplainingly and perseveringly he presses forward. The laity are not slow in seeing the merits and demerits of a physician. It is now getting to be a question among the laity a little bit different from what it used to be. The only question that used to be asked was, "Doctor, what medical school did you graduate from?" Now it is, "Doctor, are you a member of the Medical Society?" The laity cares enough about details to wish to know whether you are keeping up with your profession. Your diploma signifies that you were up-to-date when you graduated, but there is a difference between then and now. They want to know how you are now. The secretary is in position to see this increase of practice go to a meritorious member who belongs to the County Society, who keeps up, attends meetings and does his part.

The secretary usually understands from the tone of a letter received by him from a member, whether this member is a live wire in his Society. It doesn't take him long to find out from reading correspondence received by him from the various members, whether they are in touch with their County Society, and thereby receiving the benefits which they deserve and to which their patients are entitled. With his knowledge of the members, he is in position to tell whether a given member has rubbed up against the membership of his County Society, thus broadening his intellect and brightening his ideas, and preparing himself for a better administration of his high office than those who are members by virtue of the Society's toleration only. There is a difference in understanding selfish benefits to be derived from those benefits a medical organization is intended to convey. The man who joins a medical society for mercenary or selfish motives should not be tolerated by the membership of any society, but should be unmercifully kicked out as soon

as discovered. There is no place in medical organization for any such. Neither is there a place for drones in the medical bee-hive, those who propose to do nothing but live on the honey stored up by the workers. There must not be any human vampires to suck the life blood of the live members. When God said that man should earn his bread by the sweat of his brow, he intended this to apply to all classes of people. These fellows are not exempt. They should not be tolerated, nor allowed to receive something for nothing.

The secretary, attending all meetings of the Society (if not, he should do so) is in a position to know who are the workers, and who are receiving the benefits from society work. He knows who belongs to this class of members, who keep the Medical Society alive by their attendance and by their contributions to its welfare.

There is only one end to attain by membership in a Medical Society. To sum up all the views as may be understood by secretaries; to sum up all the benefits to be derived from medical organization, there is only one end that should be in view. This is known to you all, as well as understood by your secretary. This ultimate end is the broadening of the intellect. Everything else that medical organization can possibly give to its members; every honor that may be placed on the shoulders of the worker, pales into insignificance when contrasted by this one single feature alone. The broadening of the intellect and a better preparation to do professional work is what medical organization was designed for its members. If you are not securing this from your Medical Society, there is only one person to blame for it, and that is you. If you are not in close touch with medical organization, the Society is suffering from your negligence. Your patients are also denied that which you upon your honor as a physician, should give them, and which it is your duty to prepare for them. These benefits are rightly within their reach, only you are in the way. Better would it be if you would step down and out. Any member who is mean enough to join a medical society from selfishness and never attend its meetings, is robbing his patients of

the service which they rely upon him to perform; and the man who is so neglectful as to do this is not doing the Society justice that honored him in electing him to membership. As a rule this very class of members feel themselves bigger than organized medicine. If they could see themselves as others of the profession see them, they would soon understand how large a place they occupy in the minds of the medical profession. Unfortunately for the laity, the size of the spheres that they fill in organized medicine is a delusion. These fellows can find out how large a place they occupy in the minds of organized medicine, if they will only thrust their hand into a bucket of water and withdraw it. The hole left behind represents their greatness.

Every member in a medical society should have a part to perform and perform it. Every member has a part to perform, but very few will do so cheerfully and without hesitation. What is your part, you may ask? It is the same as mine; it is the same as that of any other member. You should attend the meetings of your Society first, last, and all the time. Encourage it by your presence; assist and stimulate your officers in the discharge of their duties in every way within your power; be ready to serve when called upon. Never let there be known among us such a word as, "Can't" in matters medical. Never let there be such an excuse offered in the Medical Society as "I haven't the time." You have as much time as any one else in the world. No man has ever cornered time. Every fellow has the same twenty-four hours in the day. You have the time if you will only make the division right.

Now, a word concerning your secretary. Get the idea into your heads one time for all, and let it remain there forever indelibly fixed, and that is, that the County Secretary is the hardest worker of any of your members and receives less thanks than any other one in your entire organization. About the only thing that ever comforts him is his self-consciousness of duty well performed; provided, however, that he is a secretary in the true sense of the word; that is what I mean when I mention the word, "Secretary."

Then, in conclusion, are you receiving the benefits from organized medicine as is usually understood that you should receive, and which is intended that you should enjoy? If not, who are you blaming? The benefits of medical organization are yours if you will only reach out and get them. The bright light of the sun is yours if you will only enjoy it. Reach out and take your share. Are you doing your part in this work? If not, will you in the future?

IS THE STATE FOOD AND DRUG ACT AS IT AFFECTS MEDICAL PREPAR- ATIONS DESIRABLE LEGIS- LATION?

By John B. Bond, Sr., M. D., Druggist,
Little Rock.

I thank the editor most cordially for his courteous invitation to make use of the columns of the Journal for some brief comments on the Arkansas Food and Drugs Legislation of May 28th, 1907.

I gladly avail myself of this splendid medium to appeal to the medical profession of Arkansas to come to the aid of those druggists of this State, as well as of the Nation, who have gladly accepted the principals of the Pure Drug Law, and are honestly trying to obey the same in spirit as well as in letter.

The National Food and Drugs Act is the product of long endeavor by the leaders of the medical profession of the United States. Recent information from the British Empire shows that they too, are adopting an act on the same line.

It is difficult to conceive of any protective legislation more valuable to afflicted humanity, than is this. Just consider that since the National Law went into effect January 1st, 1907, no manufacturer of medical preparations, however selfish or venial he may be, has dared to put out a proprietary preparation or a patent medicine that contains any of certain named "habit-forming" drugs without he placed upon the principal label, and in plain English words, without comment, the names and quantities of

all such "habit-forming" drugs employed therein.

What does this mean? Why, that the really harmful preparations whether proprietary, pharmaceutical, or so-called "patent" must be *uncovered to public inspection*, under a very heavy penalty for failure so to do.

In consequence of this, many proprietary medicines, and some pharmaceuticals used exclusively by the medical profession, have gone into deserved disuse, which will soon end in oblivion.

People are thus warned of the harmful nature of medicines they propose to use in self-medication. While this is certainly not the *perfection* of "patent medicine" regulation, all must admit that it is a very long step in the right direction, and all humanitarians assuredly applaud the Federal Government for its tardy enactment of a law so earnestly desired by the best thought of medical, as well as lay, philanthropists.

But, the Arkansas Pure Food and Drugs Act is, in all essential points, a *verbatim* copy of the Federal Law. If the latter be a desirable law for interstate commerce, as no one denies, why should any one denounce its twin, the Arkansas Law, which will afford similar protection from heartless manufacturers of this State if any there be. To denounce this effort is surely the result of prejudice or of misinformation.

The Federal Law has been copied by some twenty-five states of the Union, including Arkansas. Will not the medical men of this State lend their powerful influence in the enforcement of this law by demanding its full observance of the same on the part of state manufacturers?

The writer of this had nothing whatever to do with the drafting or the enacting of the Law; in truth the passage of the Act was a complete surprise to him, coming as it did long after the Bill, so greatly feared by the druggists of the State, had been defeated.

The point of the whole matter appears to the writer to be, is the law a good one though it only partially covers the much desired object in the minds of many honorable physicians.

If the law is a good law (and who will gain-say it?), why not refrain from acrimonious

comment? Let bygones alone and support the authorities of the State in the rigid enforcement of the law. If this support be not given will not the authorities, the State Board of Health and the Commissioner of Agriculture, become luke-warm, not to say, wholly indifferent to the matter? Is such a result to be desired?

The writer is fully aware that many medical gentlemen favor much more "regulation" than the present law affords. The sale and use of secret medicines is very obnoxious to a large part of the profession. Self-medication, in any, save, the most simple ailments, meets with the unqualified condemnation of most physicians, as well as prudent laymen. This is just as it should be. But does any one really expect the time ever will arrive when the American public will cease to buy and swallow the innocent, or rather, the comparatively innocent, ready-made medicines, which are sold by the express permission of the Government? Especially, when physicians themselves, persist in the daily practice of ordering "pharmaceuticals" of which none but Omnipotence (outside of the manufacturer) knows the contents.

Why not be content with reasonable regulation and make progress toward a higher plane by degrees and by educating the public?

Before closing this hasty comment, permit me to quote a few words from the law that becomes operative in Arkansas, January 1st, 1908:

"Sec. 1. It shall be unlawful for any person to manufacture within this State, any article of food or drugs which is adulterated or misbranded; for such offense, he shall, upon conviction, be fined not exceeding \$500.00, and for subsequent offenses, not less than \$1,000.00 * * * *"

"Sec. 6. For the purpose of this Act an article shall be deemed to be misbranded, if the package fail to bear a statement on the label of the quantity of any alcohol, morphine, opium, cocaine, heroin, eucaine, chloroform, cannabis indica, chloral hydrate or acetanilid, or any derivative or preparation of any such substance. (Observe that the pack-

age is misbranded if the contents above specified are not disclosed.) Provided, however, that nothing in this paragraph shall be construed to apply to the dispensing of prescriptions written by regularly licensed practicing physicians, veterinary surgeons and dentists, nor to such drugs as are recognized by the U. S. Pharmacopeia and the National Formulary and which are sold under the name by which they are recognized. * * * *"

I also quote one item from the Regulations for the enforcement of the Law, by the State Commissioner of Agriculture:

Reeregulation 4 The Label.

"(d) No false or misleading statement, design, or device regarding the article or ingredients, or the quality, or the uses, or the effects thereof, must be employed on any of the labels or any circular or descriptive matter accompanying the package. The words "positive cures" "infallible cures" or even "cures," or equivalent words, are misleading."

If the regulation of patent and proprietary medicines is the object sought, why not sustain by all means in our power, this law and advance only with the Government in the way of further limitations.

To this end will not the great medical profession of Arkansas aid representative druggists in the work of elevating their profession on the lines of purity and safety of products and truthfulness of statement.

MEDICAL FRAUDS.*

By J. S. Westerfield, M. D., Conway.

Patent medicines, secret nostrums, fake remedies, secret proprietaries, medicines of any sort backed by guarantees to cure, or trumped up testimonials—all these belong to the same class, and one is entitled to about the same respect as another.

The manufacture and sale of secret remedies is not of recent beginning, nor are they peculiar to any country. This may be said to be an old

*Delivered before the Eighth District Medical Society Dardanelle, August 26th, 1907.

disease that has lately assumed epidemic proportions. It is not influenced by climatic conditions, but attacks mainly civilized communities, and its greatest spreads have been coincident with periods of prosperity.

The subject has been discussed of late, but so far opinions differ regarding the specific cause and best ways of management. Review of the literature, which is now rather plentiful, will demonstrate that as to the precise legitimate relations of the medical profession to proprietary medicines, opinions are not altogether harmonious. For one to take an optimistic view of the subject with reference to a speedy relief, seems at this time hardly tenable.

The manufacture of medicines, like the manufacture of other things to be sold and consumed by the masses, has become commercialized to an extent that the exploiters, in many cases, figure more on the profits to be gained than the real necessities or value of their wares.

If you inquire why there are so many medicines on the market, my answer would be that the people demand them. The appearance of any illness or indisposition calls for medicine. To many, the doctor is regarded as a mere dispenser of medicines. The sick man will absorb all the odds and ends that can be raked up about the house, then draw on the nearest drug store, and if not relieved, will send for a doctor. This universal demand for medicine is being met by an output that is amazingly enormous, and little short of alarming. Drug preparations on the market are actually almost as numerous as breakfast foods, and are fully as well advertised. This over production is not confined to the manufacture of medicines, but is seen in all the branches of commerce. Whenever an honest manufacturer creates a demand for a useful article, or a valuable invention comes out, there are always plenty of people ready to go into the business and offer something just as good.

The zeal employed in persuading people to swap hard earned dollars for this class of products of one sort and another is very much out of proportion to any benefits derived, to say the least.

The ready cash that annually changes hands for patent churns, washing machines, rat-traps,

farm machinery, soap receipts, and like devices that nobody ever uses; shade, ornamental and fruit trees that can be safely warranted not to grow, bloom or bear; and books that nobody ever reads, would be amply sufficient to support all the paupers and insane of the land.

The quack's main stock in trade is a gullible public—not necessarily an ignorant public—for the person of education will take over a gold brick about as readily as the less informed.

The progress that has been made during a century of boasted advancement in the arts and sciences, may be roughly estimated by the fact that we still find enlightened people carrying around in the pocket an Irish potato to cure rheumatism, a buckeye for hemorrhoids, and in some communities, a chop-ax under the bed is regarded a certain remedy for post-partem hemorrhage.

With this statement of fact, I prefer to leave the question with the mathematically inclined to calculate how long it will take to reach the more ignorant.

It has often been said that the people like to be humbugged, which in a sense may be true; it is equally true that they do not like to be reminded of it, nor has any one ever been known to make an open confession to the charge, and we can always find plenty of people ready to furnish the accommodations if the price is forthcoming. Perhaps, we could assail patent medicines with better grace and more telling effect if we began the crusade at home.

The patent medicine people may be accused of crooked methods, but not of being fools. The following clipping from the patent inside of a local newspaper, doubtless paid for, and published in hundreds of papers of the country, will furnish interesting reading for the masses during the next several months:

USED BY THE DOCTORS

Ninety Per Cent of the Drugs Prescribed Are
Patent Medicines.

"Despite the opposition of physicians, especially of those whose experience has been neither far-reaching nor profitable, to "patent" medicines, ninety per cent of all drugs that physi-

cians use are put up and compounded by manufacturing concerns,—are, in fact, “patent” medicines just as truly as if they were advertised in the newspapers.

“The average doctor knows little or nothing of pharmacy and is, therefore, glad to depend on the very medicines, which in public he condemns, just as he is obliged in many cases to depend on the diagnosis of the patient himself, even while publicly decrying what he calls “self-diagnosis.” How rapid has been the growth of the professional use of “patent” or “proprietary” medicines is shown in an article written for the *Journal of the American Medical Association* for September 29, 1906, by A. Jacobi, M. D., LL. D. He relates that 50,000 prescriptions, compounded in several drug stores were carefully examined. From 1850 to 1870 no prescription was found for ‘patent’ or ‘proprietary’ medicines. In 1874 but one prescription in 1,500 called for ready-to-use remedies. Between 1875 and 1880 the number calling for “patent” or “proprietary” medicines equalled two per cent of the total. This increased to 5 per cent in the period between 1880 and 1890. In 1895 it was 12 per cent, in 1898 it was 15 per cent, and in 1902-1903 was from 20 to 25 per cent.

“Dr. Jacobi says that in a large store he was assured that 70 per cent of the prescriptions were for “patent” and proprietary’ medicines, and this probably is approximately the correct proportion at the present time. From this it would seem that if the “patent” and proprietary” medicines are good enough for physicians to prescribe in seven cases out of ten they are good enough for family use in cases of necessity and where the symptoms are well known and as easily understood by the people as by the doctors.”

While some of these charges are at variance with facts, and deductions inconsistent, the principal charge (that of prescribing secret remedies by the profession) is not entirely without foundation.

It is only necessary to look over the prescription files in any drug store, or take a glance at the five-pound bottles and gallon jugs in doctors’

offices to be convinced that much of the remedies prescribed are of the ready-made kind, and some of them, at least, no better than those advertised in newspapers. Many of these—if not all of them—contain remedies in every day use, and there seems no good reason why, if a doctor wants to use them, he should not make his own combinations to suit individual cases. To illustrate, I am not prepared with any ready excuse why a physician should prescribe a ready-made 4-oz. mixture of the bromides containing half an ounce of the active ingredient, which costs one dollar, when it can be had for fifteen or twenty cents. For several reasons, it can hardly be denied that the extent to which the proprietaries are being used is ill advised. They are expensive, owing to the fact that the consumers have to pay for the advertising; we are not able to judge of their reliability, and often do not know what they contain. The art of combining drugs of the Pharmacopea into eligible prescriptions is being neglected; we are learning to rely on exploiters of specialties for our therapeutics, while retail pharmacists are suffering from chronic ennui, having little to do but wash and fill bottles.

A lady for whom I was asked to prescribe, showed me a bottle containing medicine she had been taking. She said the label stated that it was good for rheumatism and gout, but not having improved, she felt a suspicion that the doctor who prescribed it had been mistaken in his diagnosis.

Harper’s Weekly, with some outside help, has lately thrown some rather weighty stones into the camps of the quacks and patent medicine vendors which ought to have good effect. But after all is done, it will be found as impossible to keep people from patronizing them as it is to prevent the same people feeding babies on colored paste-board, slate pencils and green apples. And now, if Harper’s should decide to shie a few gravels in the direction of some of us doctors who prescribe all sorts of proprietaries, they could doubtless make us feel ashamed.

It does not matter so much who makes a medicine, or how it is advertised, but in any

case, the physician who prescribes it, or the sick man who takes it, has a right to know what he is prescribing or taking.

The strong opposition to legislation in that direction is the best evidence that laws requiring the formula to be printed on all packages would, if enacted, sound the death knell to fake remedies, and leave only those that are backed by some merit. After all, therapeutics is the means relied upon to accomplish the ends sought by the sick. It may consist of rest, exercise, bathing, diet, climate, electricity, suggestion, words of encouragement or medicines. The great rush of the profession to attain brilliant results in surgery, to explore "the inner man" by palpation, auscultation, percussion, illumination, and elaborate microscopic and, we may say, post-mortem findings, which are all proper and well enough, has resulted in too much neglect of therapeutics by the general profession, leaving largely this "final great aim of medical research" in the hands of drug manufacturers and jobbers.

I particularly want to impress what I conceive to be a fact that can not be disputed: That the people and the profession are over-run with medicine. Leaving out for the moment the question of quality, there is much more than can possibly be taken care of. The task of separating the good from the bad is one grievous to be borne. A redundancy of remedies are to the physician, as an unnecessary lot of instruments to the surgeon, or useless tools to the mechanic. A few well-tried and well-understood remedies in the hands of a pains-taking practitioner can do more good and less harm for the sick than a multiplicity of remedies but poorly understood, or that we know nothing about.

No one man can master and keep in mind the therapeutic effects of all the official preparations, to say nothing of the non-official proprietaries; nor could any one use the hundredth part of them in a life time, supposing he knew how.

In conclusion, we must not lose confidence in the people. No truer words were ever spoken than those of Lincoln: "You can fool all the people part of the time, and part of the people all the time, but you can't fool all the people all

of the time." The signs of the times indicate a healthy reaction. Able writers and speakers outside the medical profession, are at work creating a proper sentiment. Laws have been enacted that are in the right direction, which will doubtless be improved. The medical profession is subject to err, just as others, but have never been too proud to correct an error when discovered. Just yet, complete protection can not be vouchsafed against preparations that are worthless, and others that are harmful. We can, however, put ourselves in a better light before the public by limiting our remedies to a convenient and comprehensive number of the standard drugs and potencies of the pharmacopea, especially eschewing secret remedies.

When this is done, it will be good for the conscience of the doctor and better for the sick.

AMENDMENT TO SECTION 401 PENAL CODE STATE OF NEW YORK.

Section 401 of the Penal Code has been amended so as to read as follows:

Any person, who, in putting up any drug, medicine or food or preparation used in medical practice, or making up any prescription, or filling any order for drugs, medicines, food or preparations puts any untrue label, stamp or other designation of contents upon any box, bottle or other package containing a drug, medicine, food or preparation used in medical practice, or substitutes or dispenses a different article for or in lieu of any article prescribed, ordered or demanded, or puts up a greater or less quantity of any ingredient specified in any such prescription, order or demand than that prescribed, ordered or demanded, or otherwise deviates from the terms of the prescription, order or demand by substituting one drug for another, is guilty of a misdemeanor; provided, however, that, except in the case of physicians' prescriptions, nothing herein contained shall be deemed or construed to prevent or impair or in any manner affect the right of an apothecary, druggist, pharmacist or other person to recommend the purchase of an article other than that

ordered, required or demanded, but of a similar nature, or to sell such other article in place or in lieu of an article ordered, required or demanded, with the knowledge and consent of the purchaser. Upon a second conviction for a violation of this section the offender must be sentenced to imprisonment, for a term of not less than ten days nor more than one year, and to the payment of a fine of not less than ten dollars nor more than five hundred dollars. The third conviction of a violation of any of the provisions of this section, in addition to rendering the offender liable to the penalty prescribed by law for a misdemeanor, shall forfeit any right which he may possess under the law of this state at the time of such conviction, to engage as proprietor, agent, employee or otherwise, in the business of an apothecary, pharmacist or druggist, or to compound, prepare or dispense prescriptions or orders for drugs, medicines or foods or preparations used in medical practice; and the offender shall be by reason of such conviction disqualified from engaging in any such business as proprietor, agent, employee, or otherwise, or compounding, preparing or dispensing medical prescriptions or orders for drugs, medicines or foods or preparations used in medical practice.

Section 402 This act shall not affect or impair any liability, penalty or punishment under the provisions of section four hundred and one as the same existed prior to the time this act takes effect, but the same may be enforced, prosecuted or inflicted as fully and to the same extent as though this act had not been passed; and all actions civil or criminal instituted under or by virtue of said section as the same existed prior to the passage of this act, and pending immediately prior to the taking effect hereof, may be prosecuted and defended to final effect in the same manner as though this act had not been passed.

Section 403. This act shall take effect September first, nineteen hundred and seven.

DERMO-VENEREAL DON'TS.

Don't try to stop a post-partum hemorrhage by ligating the post-partum artery. Pack

the vagina and send for some one who knows.

Don't predict the sex of a child when it is dead. Extract it and the undertaker will do the rest.

Don't magnify the danger of an eruption; but don't minimize the worth of your services.

Don't try to stop a urethral hemorrhage by injections of hot water. Use a perineal crutch.

Don't excise a chancroid. It may be too extensive to permit a cosmetic operation and might result in a large chancroid of the urethra.

Don't castrate for an indurated syphilitic testicle. It can be made soft by mercurial inunctions.

Don't call an epididymitis a swelled testicle. The testicle rarely swells as a result of a gonorrhea; it is the epididymis.—American Journal of Dermatology.

PURGEN NOW BEING EXPLOITED IN THIS COUNTRY.

The physicians of the United States are receiving a neat package containing samples of a German proprietary—Purgen. The container is an ingenious one and, besides the tablets, includes a circular in English, although mailed in Europe, describing the remarkable virtues of this "new synthetic aperient." It has been considered strange that this proprietary, which has been advertised so thoroughly in Europe, Australia, etc., should not have made its appearance in this country. Now it is here, and it is well that physicians should know what Purgen is and not be mystified or misled by the literature that they may receive regarding the preparation.

The following appeared in The Journal, Jan. 5, 1907, page 64, and is reprinted now as being especially timely:

The report of a case of poisoning by purgen (phenolphthalein) is the occasion for some pertinent observations by Dr. G. Brasch as to the proper introduction of such remedies to the medical profession (*Zeitschrift für Medizinalbeamte*, Abst. in *Apotheker-Zeitung*, No. 59,

1906.) He agrees with Best that all such remedies should first receive a thorough trial in an institution subject to state supervision, before they are advertised to the medical profession, so that their harmlessness in appropriate doses may be ascertained by a method free from liability to error. The manner in which the manufacturers introduced purgen to the profession and to the laity is to be condemned, and probably led to the symptoms of poisoning exhibited in the case of Dr. Best and tends to discredit a remedy which is harmless and efficient if used in proper doses. The manufacturer of such a preparation is inclined, for obvious reasons, to put the dose of his preparation much too high. The most important point, however, is the objectionable character of the names given to such articles. The organic compound phenolphthalein has been known for a long time and has been widely used as an indicator. Accidentally it was discovered that phenolphthalein possessed laxative properties and thereon it was proposed (1901) as a medicine under the name "purgen." It is sold in tablets containing 0.50, 0.1 and 0.5 grain phenolphthalein mixed with sugar and flavored with vanilla. The author says: "But it is very desirable—and I regard this as the most important part of my communication—that phenolphthalein should be received into the materia medica under its own name. The addition of vanilla and sugar and the designation as 'purgen' by the manufactures is to the highest degree superfluous and the arbitrary dosage in three strengths with the ridiculous designation 'baby,' 'for adults,' 'for patients confined to bed,' are merely calculated to prejudice the physician who is accustomed to individualize in his prescriptions, against a remedy which is in itself an excellent one."

As explanatory to the last sentence, it should be stated that in Europe purgen is put up in three dosage forms, "infant purgen for children," containing 3-4 of a grain; "adult purgen for chronic constipation," containing 1 1-2 grains, and "strong purgen for invalids," containing 7 1-2 grains. The form in which it is being sampled in this country is in the medium dose, 1 1-2 grains.

Physicians should remember that the promoters of purgen are simply introducing a chemical well known to laboratory workers for the last twenty years, which has been recognized as an aperient for at least seven years, and which can be purchased for 40 cents an ounce, whereas an ounce of phenolphthalein in the form of purgen will cost \$3.20 wholesale. The enthusiastic praise of the remedy, found in the advertising circulars, should be subjected to critical judgment on account of its source and motives.

It is undoubtedly true, however, as we have previously stated, that phenolphthalein is worthy of a trial. In the *British Medical Journal*, Oct. 18, 1902, F. W. Tunnicliffe speaks of the virtues of phenolphthalein, and the conclusions reached by him were that it is a useful aperient, without irritating action on the kidneys, and is especially valuable in jaundice, its depressing action on the circulation being less than sulphate of magnesia.

Phenolphthalein is not in the Pharmacopeia, but has been included in "New and Non-Official Remedies" by the Council on Pharmacy and Chemistry. From this we quote:

Actions and Uses.—Phenolphthalein acts as a purgative, but appears to possess no further physiologic action. A case of poisoning from taking 1 gm. (15 grains) is reported.

Dosage.—For adults the average dose is 0.1 to 0.2 gm. (1.5 to 3 grains) given as powder, in cachets, capsules or pills. It may be given with safety in doses of 0.5 gm. (8 grains), and these doses seem to be necessary to secure its effects in bed-ridden patients or in obstinate cases.

We have gone into this matter again so that our readers may have some knowledge of this remedy, and we hope that if they conclude to try it they will use the chemical itself and under its own name.—Journal A. M. A.

News Items

PERSONAL.

Dr. F. Vinsonhaler has returned from the Adirondacks.

Dr. S. Smith Stewart has returned from his vacation.

Dr. Jas. H. Lenow returns on the 20th after an absence of several weeks in Colorado.

Dr. Arthur B. Loving has been elected president of the Pine Bluff Board of Health.

Dr. E. Meek, Professor of Obstetrics, P and S., is visiting the Jamestown Exposition.

Dr. W. S. Snodgrass, Secretary of the P. and S., is in New York doing post-graduate work.

Dr. J. B. Bond, Sr., is in Philadelphia attending the National Pharmaceutical Association.

Dr. D. D. Wells, formerly of Prairie county, has moved from Acapulco, Mexico, to Dallas, Tex.

Dr. Leonidas Kirby, secretary of the Boone County Medical Society, called at the secretary's office on the 15th.

Dr. H. H. Neihuss, who has been at Mt. Nebo for two months, has returned and resumed his practice at Wesson.

Dr. J. J. Johnson, of Harrison, has returned from Boston, where he has been attending the Harvard Summer Medical School.

Dr. C. R. Shinault, Professor of Gynecology in the P. and S., has gone to the Jamestown Exposition, and will visit New York, Philadelphia and Boston before his return.

Dr. W. S. Lindsey, Secretary of the Sevier County Medical Society, passed through Little Rock enroute to Baxter county where he goes to appear as a witness in a murder trial.

Dr. Hodgen Kirby, Washington University, '06, has removed from Harrison, and will locate in Little Rock. Dr. Kirby is a son of Dr. Leonidas Kirby, of Harrison, ex-president of the Arkansas Medical Society.

General News

The 18th Annual Session of the Washington State Medical Association will be held in Elks'

Hall in the Alaska building, Seattle, September 10-12, 1907.

Dr. Isadore Dyer, editor of the New Orleans Medical and Surgical Journal and Professor of Dermatology in Tulane University, Medical Department, has been elected Sub-Dean of Tulane University.

At the August meeting of the Washington State Board of Health, Dr. Rose Bebb was appointed state bacteriologist, the last legislature having made sufficient appropriation to maintain such a laboratory. Dr. Bebb is a graduate of the University of Minnesota. She was connected with the New York Board of Health before moving to Seattle.

The next annual meeting of the Mississippi Valley Medical Association will be held at Columbus, Ohio, October 8-10, 1907. Dr. A. U. Williams, of Hot Springs, will read a paper entitled, "Some Cases of Reinfection With Syphilis."

Judging from a newspaper report, there promises to be an interesting "war of words" at Hot Springs between the "internal" and "external" vaccinationists. The Hot Springs Board of Health has promulgated a law that in order for a pupil to be admitted to the public schools, he must show evidences of a previous successful vaccination, or produce a certificate from a physician, stating that a recent vaccination was done according to the "external" method, *i. e.*, by means of inoculation with a vaccine point or serum. Dr. P. B. Hallman, a Homeopathic member of the Board, dissents from this rule, and contends pupils vaccinated by the "internal" method, should also be admitted. The entire Homeopathic fraternity of the city is supporting him in his dissension, and injunctions and damage suits are freely spoken of. The outcome of this controversy is awaited with much interest for it will settle a question that has not heretofore been brought before the courts. It is safe to predict however, that the "internal" vaccinationist will go down in defeat before the bar of reason.

The thirty-fifth annual meeting of the American Public Health Association will be held at Atlantic City, N. J., September 30-

October 4. Dr. Domingo Orvananos, of Mexico City, Mexico, is president, and Dr. Charles O. Probst, of Columbus, Ohio, secretary.

DISTRICT AND COUNTY SOCIETIES.

THE CALHOUN MEDICAL SOCIETY met at Hampton, August 27. There was a large and representative attendance, and the papers read were freely and profitably discussed. Perfect harmony prevails in the society, and the indications for profitable monthly meetings are good.

Dr. C. T. Black, a valued member, has moved to Glen Pool, I. T.

THE MISSISSIPPI COUNTY MEDICAL SOCIETY will hold the next session at Osceola, Thursday, Sept. 12th, so writes the secretary, Dr. Thomas G. Brewer. No formal program has been prepared, but the meeting will be devoted to the discussion of the relations between the profession and the public. The local doctors will entertain the guests at the Beall Hotel.

THE SEVIER COUNTY MEDICAL SOCIETY held the last regular meeting at Horatio, September 3rd. Dr. E. T. Isbell, read a valuable paper on "Acute Dysentery." The discussion brought out many points of practical value. Dr. Archer of DeQueen, presented the following questions as a part of the program:

1. Describe the portal system.
2. Describe the uterus, its position and relations.
3. Give origin, course, exit and distribution of pneumogastric nerve.
4. Describe the three principal functions of the liver.
5. What are the symptoms of acute suppurative appendicitis?
6. How would you treat a case of cardiac dropsy?
7. What are the symptoms of trichianosis?
8. Describe the proper technic of uterine curettment and indications and contraindications for same.
9. Give treatment for pernicious vomiting of pregnancy.
10. Cerebral hemorrhage—most common location, prognosis and treatment.

THE THRID DISTRICT MEDICAL SOCIETY will meet at Helena on October 29th., Dr. W. W. Hipolite, DeValls Bluff, president; Dr. E. D. McKnight, secretary. This society is second only in importance to the State Society, and the program to be rendered, to be furnished later, will be looked forward to with interest and pleasure.

THE EIGHTH DISTRICT MEDICAL SOCIETY met at Dardanelle, Monday and Tuesday, August 26th and 27th. Yell, Faulkner, Pope and Pulaski counties were represented. The address of the president, Dr. J. S. Westerfield, was able and trenchant. Dr. C. C. Stephenson, president of the Arkansas Medical Society, read a paper, entitled, "Some Views Concerning Medical Organization as Entertained by an Ex-secretary," which was received and endorsed by the society and ordered printed in the JOURNAL.

The old committee on constitution and by-laws was discharged, and a new one consisting of Drs. C. C. Stephenson, Norborn Jackson and J. S. Westerfield was appointed.

Papers were read by Drs. Runyan, Jackson, McKenzie and Smith, which will be published in the JOURNAL.

Dr. Norborn Jackson, of Pontoon, was elected president; Dr. J. S. Kolb, of Clarksville, vice-president, and Dr. S. P. Vaughter, Little Rock, secretary-treasurer.

Monday evening the society was hospitably entertained by the Yell Vounty Society at a banquet at the Hotel Central.

THE PULASKI COUNTY SOCIETY is enjoying a vacation and will not resume work until October.

THE BAXTER COUNTY SOCIETY held its regular monthly meeting at Cotter on August 22d. The attendance was small on account of rain, only five members being present. Several papers were read and discussed. Dr. C. T. Canaday made application for membership.

THE BRADLEY COUNTY MEDICAL SOCIETY met at Warren, August 16th. The attendance was better and there was more interest manifested than at any previous meeting in the history of the society. Dr. Womack, of Hermi-

tage, read a paper entitled, "Swamp Fever," and an interesting discussion followed, being participated in by Drs. Crow, Roark, Martin, Brazzell, Ginn, Green, Fike, and Hodges, of Little Rock. The next meeting will be held on the third Monday in September.

THE SECOND DISTRICT MEDICAL SOCIETY will meet at Batesville, October 3rd, at 10 o'clock, a. m. John B. Grammar, president, Dr. John L. Jones, secretary. The Independence County Medical Society has made ample provision to entertain all visiting doctors. The program is as follows:

MORNING SESSION

President's Address, J. B. Grammer, M. D.
Organization, J. M. Jelks, M. D.
Hydrophobia, J. C. Cleveland, M. D.
Discussion led by Oscar Jones, M. D.
Pneumonia, J. A. Williamson, M. D.
Rubella, G. W. Graves, M. D.
Discussion led by R. H. Hodges, M. D.
Discussion led by J. R. Crigler, M. D.

AFTERNOON SESSION

Lipoma of Neck, L. E. Willis, M. D.
Discussion led by W. F. Ball, M. D.
Corneal Ulcer, R. E. Dorr, M. D.
Discussion led by W. I. Huddleston, M. D.
Puerperal Eclampsia, J. M. Jones, M. D.
Discussion led by C. West, M. D.
Pelvic Abscess, W. B. Lawrence, M. D.
Discussion led by T. J. Woods, M. D.

PROGRAM OF THE MEDICAL ASSOCIATION OF THE SOUTHWEST.

ANNUAL MEETING HOT SPRINGS, ARK., OCT.
8-10, 1907.

SECTION ON GENERAL MEDICINE

Dr. Howard Hill, Kansas City, Mo., "Gastric Ulcer."
Dr. Flavel B. Tiffany, Kansas City, Mo., "An illustrated lecture on some of the more common diseases of the eye."
Dr. F. B. Young, Springdale, Ark., "Polycystic Degeneration of the Kidneys." with report of a case.
Dr. Edwin B. Kenner, Galveston, Tex., "A Piece of Chewing Gum as a Nucleus for a Vesical Calculi."
Dr. L. O. Green, Pea Ridge, Ark., "Gastro-Enteric Intoxication."
Dr. S. S. Glasscock, Kansas City, Kans., "Divorces."
Dr. F. E. Potter, St. Joseph, Mo., "Cholecystitis."
Dr. J. M. Taylor, Ft. Smith, Ark., "Tuberculosis of the Kidney."
Dr. W. H. Stouffer, St. Louis, Mo., "Sigmoiditis."
Dr. John Punton, Kansas City, Mo., "The Failure of Law and Lawyers to Cope with Modern Medico-legal Exigencies and its Remedy."
Dr. Jerome D. Potts, St. Louis, Mo., "Rectal Diseases as Considered by the General Practitioner."
Dr. A. K. West, Oklahoma City, Okla., "The General Practitioner and the Specialist: The Sphere of each and their Relationship."
Dr. B. F. Collins, Needmore, I. T., "Hysteria."
Dr. B. L. Hale, Neal, Kas., "Toxaemia of Pregnancy."
Dr. J. W. Duke, Guthrie, Okla., "Periodical Insanity."
I. Thos. J. Beatty, Kansas City, Mo., "Disturbances of Various Kinds Coincident with the Menopause."
Dr. R. D. Moore, Omaha, Tex., "Puerperal Eclampsia."
Dr. W. R. Russell, Texhoma, Okla., "Management of Pregnancy."
Dr. J. Robt. Buchanan, Nevada, Mo., "A Plea for Greater Accuracy in our Therapeutics."
Dr. N. H. Grady, Monett, Ark., "Pneumonia; its Causation and Treatment."
Dr. W. C. Bradford, Shawnee, Okla., "Tuberculosis."
Dr. C. S. Kenny, Norcatur, Kan., "Cholera Infantum."
Dr. Wm. Frick, Kansas City, Mo., "Ringworm."
Dr. F. W. Shelton, Independence, Kan., "Medical Treatment in Surgical Diseases."
Dr. A. B. Leeds, Chickasha, I. T., "Some Observations on the Modern Treatment of Disease."

Dr. J. H. Moody, San Antonio, Tex., "Why So Many Cases of Drug and Alcohol Addiction Recur After Treatment."

GENERAL EVENING SESSION

Dr. Wm. G. Moore, St. Louis, Mo., Address: "Above all, the Clinician."

SECTION ON EYE, EAR, NOSE AND THROAT

Dr. Edward H. Carey, Dallas, Texas, Chairman's Address.

Dr. H. Moulton, Fort Smith, Ark., "Operation for Chronic Suppuration of the Frontal Sinus."

Dr. R. S. Magee, Topeka, Kas., "Management of Corneal Injuries."

Dr. Frank Boyd, Fort Worth, Texas, "Tonsillectomy and Its Necessity."

Dr. R. H. T. Mann, Texarkana, Ark.-Tex., "The Sumucus Window Resection of the "Cartilaginous Septum."

Dr. L. Haynes Buxton, Oklahoma City, Okla., "Optic Atrophy, (1) Etiology, (2) Pathology, (3) Differential Diagnosis and Treatment."

Election of Officers.

Dr. J. G. Dorsey, Wichita, Kan., "Glaucoma."

Dr. J. E. Sawtell, Kansas City, Kas., "Ethmoidal Sinus Affections."

Dr. P. P. Fulkerson, St. Joseph, Mo., "Trachoma."

Dr. Camp, Springfield, Mo., Paper.

Dr. Zuber N. Short, Hot Springs, Ark., Paper.

Dr. Turner Robert, Paris, Tex., "The Comparative Value of Chemical and Electrical Cauterization in Hypertropic Conditions of the Nose."

Dr. George W. Moser, Parsons, Kan., "Surgical Treatment of Detached Retina and Report of Several Cases."

SURGICAL SECTION

Dr. Jabez N. Jackson, Kansas City, Mo., Chairman's Address.

Dr. C. R. Shinault, Little Rock, Ark., "Drainage in Surgery."

Dr. C. E. Bentley, Little Rock, Ark., (Title to be announced.)

Dr. Joseph P. Runyan, Little Rock, Ark., (Title to be announced.)

Dr. William E. Laws, Hot Springs, Ark., "Diagnosis and Surgical Treatment of some of the Non-tubercular Diseases of the Knee Joint."

Dr. St. Cloud Cooper, Fort Smith, Ark., "Intussusception."

Dr. J. E. Gilcreest, Gainesville, Texas, "The Treatment of Wounds."

Dr. A. C. Scott, Temple, Tex., "Abdominal and Pelvic Drainage."

Dr. Bacon Saunders, Fort Worth, Texas, "Malignant Diseases of the Mammary Gland, their Diagnosis, Prognosis and Treatment."

Dr. G. B. Foscue, Waco, Texas, (Title to be announced)).

Dr. Joe Becton, Greenville, Texas, (Title to be announced).

Dr. J. D. Griffith, Kansas City, Mo., "Anatomy of the Lymphatics and Phlegmon of the Abdominal Wall."

Dr. Willard Bartlett, St. Louis, Mo., "The Value of the Metal Pin for Fractured Long Bones," with a report of nine cases.

Dr. Chas. H. Wallace, St. Louis, Mo., (Title to be announced).

Dr. Frank J. Lutz, St. Louis, Mo., "Empyema and its Treatment."

Dr. Walter B. Dorsett, St. Louis Mo., (Title to be announced).

Dr. John Young Brown, St. Louis, Mo., (Title to be announced).

Dr. Howard Hill, Kansas City, Mo., "Restoration of the Pelvic Floor."

Dr. Robert McD. Schaffer, Kansas City, Mo., "Lesions of the Sacro-iliac Joint."

Dr. Charles E. Bowers, Wichita, Kas., "Prostatic Hypertrophy in the Aged Male." Abstract Etiology. Differential Morbid Anatomy. Report of operative cases.

Dr. George M. Gray, Kansas City, Kas., (Title to be announced).

Dr. F. H. Clark, El Reno, Okla., "Surgical Affections of the Kidneys."

Dr. A. L. Blesh, Guthrie, Okla., "The Surgical Consideration of Congenital, Oral and Labial Clefts."

Dr. D. A. Myers, Lawton, Okla., (Title to be announced).

Dr. Fred S. Clinton, Tulsa, I. T., (Title to be announced).

Dr. LeRoy Long, South McAlester, I. T., (Title to be announced).

Dr. A. E. Hertzler, Halstead, Kas., "Diagnosis and Treatment of Lung Abscess."

COMMITTEE ON ARRANGEMENTS.

The following letter from Dr. T. E. Holland, Chairman of the Committee on Arrangements, should be read by those contemplating attending the meeting:

As Chairman of the Committee on Arrangements I wish to call your attention to some matters of importance to you in relation to the coming meeting of the Medical Association of the Southwest at Hot Springs, beginning Oct. 8th.

First, as to the railway train service and facilities for reaching Hot Springs. For those members coming from and by way of St. Louis there is a solid through train consisting of sleepers and chair cars leaving St. Louis in the evening and running through to Hot Springs by way of the Iron Mountain route. Time 12-2 hours.

Through sleepers are run from Kansas City to Hot Springs by way of the Missouri-Pacific Railway leaving Kansas City in the late forenoon after connecting with all lines. Time 22 hours.

Rock Island-Frisco train leaves Kansas City at 6:30 p. m., has through sleepers to Memphis where connection is made with solid train carrying sleepers and parlor cars to Hot Springs. Time 21 hours.

From Oklahoma and Indian Territory points the Rock Island route runs two through trains with sleepers from Amarillo and Oklahoma City to Little Rock, changing in same depot at Little Rock to through trains to Hot Springs. Time Amarillo 26 hours. Oklahoma City 16 hours.

From El Paso, Dallas, Fort Worth, San Antonio, Galveston, Houston and intermediate points in Texas through sleeping cars over the

Texas and Pacific and Illinois and Great Northern Railways in connection with the Iron Mountain Route to Benton, thirty miles from Hot Springs, where direct connections are made for the Springs. Time El Paso, 46 hours; from Central and Southern Texas points 14 to 20 hours.

From Memphis the Rock Island route runs two daily trains equipped with sleepers through to Hot Springs leaving Memphis morning and evening. The Iron Mountain route runs through sleepers to Little Rock and Texarkana, making direct connections for Hot Springs. Time 6 to 8 hours.

We have made arrangements with the hotels of Hot Springs on the very favorable basis of \$3.00 per day at the Arlington for those in attendance on the convention, \$2.50 at the Majestic and \$2.00 and \$2.50 at the Waverly, Waukeska, Rockafellow, Pullman, Great Northern, Moody and Milwaukee, and still lower rates at other excellent hotels.

Hot Springs is a great National resort, owned and under general control of the United States Government. It is situated near the center of the territory of the Southwestern Medical Association. Its famous waters should make it the natural resort for this territory for rest, recreation, recuperation and the cure for many ills.

We cordially invite the medical profession to come and get acquainted with Hot Springs. Bring your families and make it the occasion for a delightful outing and vacation rest. Plenty to see and do for the ladies and children.

The Government has built many miles of beautiful mountain drives and walks on its Reservation here. The scenery is delightful and the climate unsurpassed, the baths are a benefit and delight to the well, and a God send to the sick. The second Arkansas State Fair will be in progress at the Fair Grounds here during the meeting of the Association.

Book Reviews

DIAGNOSIS OF DISEASES OF CHILDREN. By LeGrand Kerr, M. D., Professor of Diseases of Children at the Brooklyn Postgraduate Medical School. Octavo of 542 pages, illustrated. Philadelphia and London; W. B. Saunders Company, 1907. Cloth, \$5.00 net; Half Morocco, \$6.50 net.

In making a diagnosis in the adult both objective and subjective symptoms are taken into account, while in the child, subjective symptoms are of little or no value. The diagnosis then of the diseases of children is based almost exclusively upon objective symptoms, and this book by Kerr is intended to present the subject of diagnostics from this standpoint. Only such collateral information is introduced as to make clear the points of diagnosis.

The chapters are concise, but sufficiently ample to cover the subject discussed. The chapters that appear to be the most impressive and distinct, are those on Vomiting, Abdominal Pain, Cough, Examination of the Chest and Diseases of the Chest. No mention is made of uncinariasis in the chapter on Intestinal Parasites.

The book is deserving of commendation, and admirably serves the aim for which it was written, namely, "to be practical, to help those who are engaged in the general practice of medicine to an early recognition of disease when it occurs in a child."

PRACTICAL FEVER NURSING. By Edward C. Register, M. D., Professor of the Practice of Medicine in the North Carolina Medical College. Octavo volume of 352 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$2.50, net.

Believing that the more knowledge a nurse has of disease and its treatment, the better are her qualifications, this little book of 350 pages is written to supply the information she should possess concerning the nursing of fevers, before her efficiency can become the greatest. The language is non-technical, or nearly so, and the essentials of the book can perhaps be grasped by the more intelligent class of nurses.

But unfortunately there is a sub-class to whom the book cannot appeal.

All of the essential diseases are considered, typhoid fever occupying over eighty pages. In the consideration of this disease, nothing is omitted that would be of service to a nurse, and every feature of the disease is discussed with practical clearness; but a doubt is felt that the lines devoted to the morbid anatomy could enhance the efficiency of the nurse. The book is practical and can be read with more profit by the physician than by the average trained nurse.

TREATMENT OF THE DISEASES OF CHILDREN. By Charles Gilmore Kerley, M. D., Professor of Diseases of Children, New York Polyclinic Medical School and Hospital, etc. Octavo volume of 597 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$5.00 net; Half Morocco, \$6.50 net.

A work that cannot fail to appeal to the every-day common-sense and practical needs of the busy general practitioner, is this new book by Dr. Kerley. Written without any special regard to a fancy literary style, but with a desire to frankly but plainly express his views concerning the management of the diseases of children, it is refreshing to be able to turn to any of the subjects treated of and find just the information looked for.

Under the subject of nutrition and growth, extending over one hundred pages, consideration is given to general properties of foods, maternal nursing, substitute feeding, milk formulæ, gavage, marasmus and malnutrition. etc. Then follow gastro-enteric diseases, diseases of the respiratory tract, contagious diseases, infectious diseases, etc. Cyclic vomiting is placed under this last head, and the stand is taken that it has a rheumatic basis and should be treated accordingly. Of course the essential diseases are treated of, the book closing with a table of drugs, their dosage and indications. The book is shorn of pedantry, and there can be no doubt of the position taken by the author. The report of cases illustrative of the more important diseases, gives the book additional strength.

DISEASES OF THE STOMACH. By Dr. I. Boas, Specialist in Gastro-enteric Diseases in Berlin, Germany. The Sole Authorized English-American Edition from the Latest German Edition. By Albert Bernheim, M. D. (Frieburg, Germany), Assistant to the late Dr. D. D. Stewart at the Philadelphia Polyclinic Hospital and Post-graduate School, as Instructor in the Department of Diseases of the Stomach and Intestines, etc., etc. Appropriately Illustrated with Five Full-page Plates and Fifty-five Engravings in the Text. 730 Royal Octavo Pages. Extra Cloth, \$5.50 net. Half Morocco, \$7.00 net. Sold only by Subscription. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia, Pa.

Boas' work on Diseases of the Stomach has long been a popular book in Europe, and a long felt want for an English-American Edition, has been supplied by Dr. Albert Bernheim, of Philadelphia, who has made a clear and pleasing translation from the 5th German edition. The book is divided into two parts and the entire subject is treated of in twenty-three chapters. Part I treats of the ways and means of making a diagnosis, and of this division the chapter treating of the examination of the gastric contents is of supreme interest. Every modern method is mentioned, and the true or even speculative value of each test is discussed with perfect clearness. In Part II, which treats of Special Diagnostics and Therapeutics, profound and exhaustive discussion is given to the round ulcer of the stomach, motor insufficiency of the stomach, cancer of the stomach and the nervous diseases of the stomach. Wherever surgical methods are mentioned as a part of the treatment of any of these affections, the translator has very properly made mention of the work done by American surgeons, especially the Mayos. A prominent feature of the book is the recital of many clinical cases illustrative of the disease under discussion. The wide experience and observation of the author, enhance the value of these reports.

The book contains over 700 pages, and the arrangement of the subjects is such as to admit of easy reference. It is so written and the subjects so handled, that the specialist and general

practitioner can equally lay claim upon it as a safe, reliable guide for their work.

A TEXT-BOOK OF PRACTICAL DIAGNOSIS. The Use of Symptoms in the Diagnosis of Disease. By Hobart Amory Hare, M. D., Professor of Therapeutics in the Jefferson Medical College of Philadelphia. New (6th) edition, thoroughly revised and rewritten. Octavo, 616 pages, with 203 engravings and 16 full-page plates. Cloth, \$4.50 net; leather, \$5.50, net. Lea Brothers & Co., Philadelphia and New York, 1907.

If the value of a book can be judged by the number of editions through which it has passed, two books written by Professor Hare, Practical Therapeutics and Practical Diagnosis, are entitled to the claim. Practical Diagnosis, just from the press, has been thoroughly revised, contains 616 pages, 203 engravings, 16 full-page plates and is printed on good, heavy paper.

As the cure or alleviation of diseases depends upon the making of correct diagnosis, any book that offers aid in arriving at these ends is welcome. Dr. Hare, himself a clinician of wide experience, treats the subject in a practical, therefore natural way, and instead of first reducing diseases to symptoms and then applying them to the case in point, the usual method, he teaches, and very properly so, that the value of each symptom should be known and understood, and a diagnosis built upon the grouping of the units, the symptoms. This is the method the practitioner employs at the bedside, and the subject should be treated of upon this plan. The book will continue to be popular, for it is not hard to discover the personality of the author on every page.

A MANUAL OF DISEASES OF THE NOSE, THROAT, AND EAR. By E. Baldwin Gleason, M. D., Clinical Professor of Otology at the Medico-Chirurgical College, Philadelphia. 12mo of 556 pages, profusely illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Flexible leather, \$2.50 net.

This manual, as stated by the author, is intended for the student and practitioner. It is more than compend and less than the more comprehensive texts, dealing with the diseases of the nose, throat and ear. As the more important facts of the anatomy, physiology and

pathology of the upper respiratory tract have received consideration, it will fill this demand of the student, while the description of and the directions for their use of instruments for diagnostic purposes, together with the practical treatment outlined and based upon the author's own experience, make strong claims upon the favor of the general practitioner. The book is in flexible binding, contains many illustrations, and has 556 pages.

Books Received

TRANSACTIONS OF THE FLORIDA MEDICAL ASSOCIATION for the year 1907.

TRANSACTIONS OF THE NEW HAMPSHIRE MEDICAL SOCIETY. Proceedings of the One Hundred and Sixteenth Anniversary, 1907.

THE ANTISEPTIC AND GERMICIDAL PROPERTIES OF SOLUTIONS OF FORMALDEHYDE AND THEIR ACTIONS UPON TOXINS. By John F. Anderson. Hygienic Laboratory No. 39, 1907. Government Printing office.

MONTHLY BULLETIN Illinois State Board of Health, August, 1907.

THE USE OF SUPRARENAL GLANDS IN THE PHYSIOLOGICAL TESTING OF DRUG PLANT. By Albert C. Crawford, August, 1907. Bureau of Plant Industry, Bulletin No. 112. Government Printing office.

YELLOW FEVER; ETIOLOGY; SYMPTOMS AND DIAGNOSIS. By Joseph Goldberger. Yellow Fever Institute, Bulletin No. 16, July, 1907. Government Printing office.

PURE FOOD LAWS OF ARKANSAS. Compiled by O. C. Ludwig. Compliments of Commissioner of Agriculture, Hon. Guy B. Tucker.

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Original Articles

A CASE OF CYSTIC TUMOR.*

By W. T. Rowland, M. D., Arkadelphia.

The classification, histology, diagnosis and treatment of abdominal tumors is of great magnitude, and unless the surgeon has an abundance of clinical data to draw upon, it is better not to attempt to treat of the subject at any great length. Therefore, it is not the purpose of this paper to enter into that phase of the subject which would require a great deal of time to prepare the paper, and a great deal more patience on your part to give it attention. On the other hand, it is in the province of the most humble member of this Society to report a case, either to bring out some brilliant result of treatment, or to record mistakes, thereby guarding against the same in the future.

In the hands of competent surgeons, an uncomplicated multilocular ovarian cyst is not recognized as of any great import, and as a rule complete recovery is to be expected. In fact where perfect asepsis is to be secured, the operation is so simple that it does not take a very daring surgeon to attempt it. Simple as it may be, we must recognize that when we invade the abdominal cavity, we are in contact with a situation not to be dealt with lightly. However proficient one may be in diagnosis, it is very difficult to be emphatic as to what will be found on the inside of an abdomen, therefore it is a very wise and convenient plan, to leave the gap down (so to speak) to protect both your diagnosis and prognosis.

Last August, Miss G., aged twenty-three, of good family history, no previous illness of any consequence, stout, strong, robust girl, regular in menstruation, was referred to me by Dr. W. M. Moore, of Hollywood, Ark. She gave me the following history: About eleven months previ-

ously, she noticed a small knot, or tumor, in her right iliac region, but as it did not give her any special trouble she paid but little attention to it. In a month or two it had increased to such an extent that she could not wear her clothes with any comfort, and so kept herself confined to her home nearly all the time. Her menses began to be irregular and scanty, and when I first saw her she had not been "unwell" for about three months. At this time she was as large as a woman at full term pregnancy, very weak, anemic and despondent. After careful examination I made a diagnosis of some kind of a cystic tumor, and advised an immediate operation, which was agreed upon, and after a few days of preparatory treatment, assisted by Doctors Moore, Williams and Fleming, we made a very large opening in the median line. The tumor consisted of one large sac, filled with hundreds of small cysts which contained fluid of different colors and composition. The main sac was opened and some three gallons of fluid drawn off, the tumor released of a few adhesions of omentum, the pedicle which was formed by the left ovarian and broad ligaments was ligated with silk, the stump touched with carbolic acid, followed with alcohol. The abdomen was thoroughly dried out with bi-chloride gauze, and the wound closed with catgut and silkworm gut.

The left ovary seemed to be normal in size. The patient did well, and on the fourteenth day the stitches were removed with not a drop of puss, and not a degree of fever since the operation.

Up to this time it was an ordinary case, and an ordinary operation. On the fifth day after removing the stitches, I noticed that she had a little fever, and by examining the wound, noticed a few drops of pus in the lower stitch. Thinking there was some little negligence in the technique, I considered there was an abscess in the abdominal wall, and dressed the wound with dry dressing. The fever disappeared; no tympany, good appetite, sleeping well, and I was surprised in three days to find reappearance of pus, temperature 101, and the patient feeling pretty bad. About one

*Read in the Section on Surgery of the Arkansas Medical Society, at the Thirty-first Annual Session, held at Little Rock, May, 1907.

ounce of pus flowed out. By using a long probe, or dressing forceps, I was unable to enter the abdominal cavity, and the pus tract seemed to have been altogether in the abdominal wall running under the line of incision. I dressed the wound daily for about five weeks, could not get any more pus to run out, and as she was feeling well, no fever, wound practically closed, and thinking it safe, allowed her to go home. The wound was dressed every other day for a week or ten days, and then about once a week; and while sometimes there was no pus, yet this opening would not completely close up. Patient was up all the time. About four months after the operation, she had two chills, or rigors; her abdomen began to enlarge; pus flowed freely; a distinct tumor could be felt, and in two weeks she was as large as before, with the same shaped abdomen. I advised opening the abdomen, which was done in a few days, and we found the same kind of tumor as before, except that the smaller cyst in the main sack had advanced to a greater degree of decomposition, and adhesions everywhere and of all sorts were present. We could not tell whether it was from the old stump or whether the right ovary had become involved. It was with a great deal of difficulty that the mass was released, and the opinion was held that nothing we had ever seen quite equaled this condition. The wound was closed, toilet completed, patient put to bed, and in about two hours she was dead.

Now, in conclusion: What was the cause of the sudden return of the growth? Was it infection due to technique? If so, why did it not manifest itself prior to eighteen days after the operation? Was it malignant? If so, when did it become so?

ACUTE SUPPURATIVE OSTEOMYELITIS. WITH REPORT OF CASES.*

By J. J. Smith, M. D. Paris, Ark.

The frequency of this disease, its disastrous effects if left untreated and the brilliant results achieved by prompt and decisive treatment are the points to which I desire to call your attention in this paper.

Acute osteomyelitis is an acute suppurative inflammation of the bone marrow in which subsequently the bone substance is involved.

The disease most frequently attacks one of the long bones, near its epiphysis; the most common

seat being one of the bones entering into the joint either just above or below the knee.

While it may be the result of local injury, it almost always occurs spontaneously and is due to the deposit through the blood current of a pathogenic organism.

The cancellous structure near the extremity of the long bones is a favorite seat of deposit because the capillary circulation is more sluggish here.

The result of acute inflammation of the medulla is pus formation in the medullary substance, inflammatory products are thrown out, filling up the cancellous spaces and the Haversian canals, the capillaries of the bone become thrombosed, the circulation obstructed and the bone becomes necrosed for want of nutrition.

Without surgical treatment pus soon forms and is forced out beneath the periosteum and lifts it from the bone and later bursts externally. When the abscess bursts the tension is relieved, the constitutional symptoms are modified the pain becomes less intense and the process which separates the dead from the living bone, goes on.

The first complaint is localized pain of a boring or gnawing character, almost always near, but never in, a joint. The pain is not so severe until the tension becomes great from inflammatory exudates forty-eight or more hours after the onset. There is at first but slight elevation of temperature. After supuration and absorption of septic material into the circulation, the fever becomes high and the constitutional disturbance great.

There is no change observed in the overlying soft parts until the exudate is deposited external to the bone and lifts the periosteum from its attachment. The swelling and redness of surface occurs, soon followed by fluctuation. The temperature continues high with exacerbations and the pain severe until the tension is relieved by spontaneous opening or by operation.

The neighboring joint frequently becomes involved with resulting effusion into its capsule, the fluid often becoming purulent.

An early diagnosis is difficult in very young children and in patients who are in a stupor from rapid poisoning, but in patients who are capable of giving an account of their symptoms, the diagnosis should be made with comparative certainty, made sufficiently early to give effective treatment, yet it is exceedingly rare that a diagnosis is made. While there are several conditions for which osteomyelitis might be mistaken, acute rheumatism seems to be the stumbling block. In making a diagnosis between osteomyelitis and acute rheumatism, it should be remembered that rheumatism always attacks the joint and it rarely attacks a single joint alone, but other joints become involved in succession. The constitutional, as

*Read in the Section on Surgery, of the Arkansas Medical Society, at the Thirty-first Annual Session, held at Little Rock, May, 1907.

well as local symptoms, are mild in the beginning of osteomyelitis but rapidly increase in intensity, and later become much more severe than in rheumatism. The swelling, redness and pain on pressure appear early and over the joint in rheumatism. In osteomyelitis, the swelling and discoloration appear later after the superficial structures are affected, and are not over, but near the joint on the shaft of the bone. Before local signs of inflammation are manifest, slight pressure causes no pain, but firm, continued pressure gives great pain. Once a diagnosis is made, there is no doubt about the treatment. Local applications are out of place and palliatives are a delusion.

The object of treatment is to relieve congestion and tension in the part, to lessen the general septic condition and to prevent what is otherwise inevitable—bone necrosis. This object is obtained only by surgical measures and the sooner the diseased area is opened up and drained, the greater the chance of arresting the inflammation and of preventing or lessening the local destruction. This should be done before there are external evidences of disease, after the pus has burrowed through the lacunae and Haversian canals and separated the periosteum from the bone so as to show externally, the capillaries have already become occluded by exudates and the nutrition destroyed with resulting death of the bone.

If the operation has been done sufficiently early to prevent necrosis, the patient rapidly improves, the constitutional disturbances are soon ameliorated and the local condition is simply an operation wound.

Even when pus appears beneath the periosteum with necrosis, we should not stop at merely evacuating the pus from the external cavity, but should open freely and drain the diseased areas in the bone marrow.

This is the only rational or beneficial treatment. Where there are multiple foci of infection or the diseased condition of the medullary canal is extensive, two or more openings should be made so as to drain every infected point. The following cases are typical of what we are usually called on to treat:

Case No. 1.—C. R., male, aged 9. I first saw this patient on April 28, 1907. He had then been sick four days. He first complained of his thigh, knee and hip during the day of the 24, but was up and about the house. During the night of the 24, he had a rigor and became worse and was unable to be up any more.

When I saw him he was in a dull muttering delirium, but answered intelligently when spoken to. Temperature was 103.1-2, pulse, 126. He was indefinite as to the point of greatest pain or sore-

ness, except the glands in the groin, which were swollen and very tender. He complained of pain or pressure over the entire thigh, but more, I thought, over the lower and outer part. Anodynes were given for the night. Next morning, April 29, under anesthesia, an incision was made on outer aspect of thigh down to the bone, the periosteum was still adherent and no pus external to the bone, but pus flowed freely from the cavity of the bone when opened. The trench in the bone was extended in each direction to a distance of four or five inches in all, and the cavity curetted and packed with gauze and the thigh dressed. This pack has been removed and renewed once in every forty-eight hours since. The patient still has quite a discharge from the cavity of the bone, has but little fever, is rational, and is making fair progress towards recovery. The object here was to drain a pus cavity, thereby relieving patient of sepsis and preventing necrosis. We may have more or less necrosis in this case which will show and can be removed later.

Case No. 2. L. P., male, aged 40. This disease is rare in people of this age. I made my first visit on July 23, 1904. The beginning of his present illness dated back eighteen days. He was a very sick man, but rational. His symptoms were fever, swelling and pain in the right thigh throughout its entire extent. A diagnosis of osteomyelitis was made and operation advised and accepted. An incision was made on outer posterior and lower part of thigh. Pus welled out of the wound in great quantities before the bone, which was denuded of its covering, was reached. By means of a chisel the bone was opened, which was found to be filled with pus and necrotic tissue; the opening was extended so as to give free vent to the pus, the wound cleaned out and drained. The patient seemed relieved, at first but died some weeks later of exhaustion.

Case No. 3. This was a girl of fourteen years of age, well developed and healthy up to the time of the present attack. I saw her on July 23, 1905, the fifth day of her illness. The thigh and glands in the groin were swollen and painful. She was profoundly septic and operation was advised and I visited her the next morning for that purpose, but her condition was so extreme that we declined to operate. She went into collapse and died in the afternoon of that same day. While the diagnosis in this case was not verified by operation, a doubt has never existed in my mind as to its true character.

Case No. 4. Girl, twelve years of age. This patient lived with her parents twenty miles away, and I saw her only once, on April 16, 1907. She in howed to be very ill. She was delirious and somewhat excitable. Parents stated that she had first complained fifteen days before of a pain in

her heel and ankle, which had continued with increasing intensity to the present time. Her ankle and heel were greatly swollen and painful. The surface was red and covered with blebs or blisters showing a tendency to sloughing of the skin. There was a vague sense of fluctuation. (This patient had been treated during her entire illness for rheumatism.) The patient was anaesthetised and an incision was made from just beneath the external maleolus along the os calcis to the insertion of the tendo-achilis. There was a free flow of pus from beneath the periosteum which was still intact, but lifted from almost the entire bone. The joints between the os calcis and astragalus and cuboid bones were purulent. An opening was made on the opposite side and one near the tendo-achilis and the entire wound packed with gauze. This patient died from sepsis on the third day after operation, although the wound was kept well drained. The intention was to drain only. It might have been better to have made an opening into the bone and curetted out its porous structure, but I did not think so at the time.

Case No. 5. L. F., male, aged three. This patient lived in an adjoining county, thirty miles away. His parents stated when I first saw him on Sept. 25, 1905, that he had been sick ninety-two days. He first complained of pain just below the left knee which became intense after a few days. He became unconscious after about a week and continued so for many days. He was very much emaciated but rational when I saw him first. He had an effusion into the knee joint, his leg was greatly swollen from the knee to the ankle with two sinuses in front of tibia discharging pus. Notwithstanding the patient's extreme condition and valvular lesion, an anesthetic was given and an incision made the entire length of the shaft of the tibia and the necrosed bone, practically all the anterior part of the tibia was removed with forceps. The dead bone had already become separated from the living. This patient had a tedious recovery with many abscesses in other parts of the body, but is now in fair health with a useful limb.

Case No. 6. This patient is a girl aged four years. Her first complaint was a pain in the leg during the 28 day of October, 1902. I visited her on the following morning. She had pain in the left leg which she was able to locate in the anterior and lower part of the leg. She had some elevation of temperature, with restlessness. An opening was made in the lower and anterior part of the tibia that same day at the point indicated by the child. Even at this early date there was pus present, which was scraped out together with surrounding area, and the cavity packed with gauze. The temperature declined to normal in two or

three days and she made an uneventful and complete recovery in four weeks.

Case No. 7. This patient was a girl three years of age. She had fever with pain just below the right knee in the tibia. The parents objected to an operation at first, as the local conditions did not seem of sufficient magnitude to justify such extreme measures. Later, when it was evident that the child was exceedingly sick and the leg had become badly swollen, they consented. But the golden opportunity was gone, for, in the meantime, the patient had developed an endocarditis. It was therefore thought best not to give a general anesthetic, so an incision was made through the skin and overlying structures and the abscess cavity evacuated. The patient improved for a few days and gave promise of at least ultimate recovery, but on the sixteenth day of her illness she died suddenly when she sat up to take a drink.

Case No. 8. This patient was a boy twelve years old. I saw him on the fifth day of his illness, and operated on him the next day. He had some redness and swelling on the anterior aspect of the leg, just below the knee with intense pain. There was a quantity of pus beneath the periosteum external to the bone, a large area of bone was denuded, all of which was cut away. This patient I saw each day for three days after operation. He was profoundly septic and became jaundiced. An effusion into the knee joint occurred within a day or two. This was a patient of a neighboring physician in a near-by town. He fell into the hands of an Osteopath a few days later and I did not see him again for several months, when his father brought him to my office and I removed a small sequestrum. He is now well and a strong, healthy lad, but a little lame.

While I have said nothing so far regarding the prognosis of this disease, it would seem evident, from the number of fatalities I have reported, that I could not consider it otherwise than as grave. The prognosis is rendered much more favorable by early surgical treatment, yet it is always grave. When suppuration extends to the joint, it is more unfavorable still. Severe cases may end in death in two or three days, from rapid septicemia, or die later of pyemia, septic endocarditis or exhaustion. The prognosis is grave, not only as regards immediate, but subsequent results. It is almost certain that the patient will have a long and exhaustive illness. He may have a derangement of the neighboring joint or a deficiency of growth with deformity and lameness.

DISCUSSION.

Dr. Anderson Watkins: This subject is interesting to me from having seen a few cases of this character. One of the most interesting features about the disease is that the majority of cases

occur in the young; that is, in those whose bones are growing. I do not know whether this has been the particular experience of the author of this paper or not, because I could not understand all that he read. But, as is well known, we have at the articular ends of the bones growing tissue in a state, we might say, of anatomical and physiologic unrest, and this tissue is a particularly favorable soil for infection, and from this we then have infection of the marrow in the shaft. This, possibly, is an explanation of the fact that osteomyelitis is more prevalent in the young than in the old. On the other hand, of course, we can not say that it does not attack the aged, because many of us have seen such cases, and have also seen unfavorable terminations, such as was reported in some of the doctor's cases. We must all admit that in treating that class of cases we have experienced the same results.

Now, this brings up a point to my mind, in line with the address of Dr. Snodgrass, which he said was not open to discussion, but which we may indirectly discuss in this way. He said the surgeon should also be a good internist. That is a fact, but it is a more deplorable fact that the actual fulfillment of this demand is seen in such few cases. How many surgeons know actually the condition of their patients? Take a case of osteomyelitis of a chronic suppurative type in an old person. There isn't just osteomyelitis. Probably there are atheromatous arteries or interstitial myocarditis. We are very likely to have possibly some amyloid changes in the organs. How many of us actually investigate those conditions when we go to work to operate upon a patient? The patient has osteomyelitis or appendicitis, and nothing else; it is osteomyelitis and appendicitis that we treat. There are, furthermore, some accessory means of diagnosis which I believe the doctor possibly should have mentioned. Perhaps I did not hear them. That is, rigors; the nature of the pain, intense in its character; rising temperature following the rigors; leukocytosis. Then, again, as a possible explanation of some of the conditions which the doctor reported, we should consider the possibility of thrombosis or embolism. He reported one case of a patient who died suddenly. I believe that patient apparently was doing nicely. There was hardly much room for doubt that death was due to an embolus. It might have been congestion or heart failure, but more probably embolism. We must take all these things into consideration, I think, in treating these cases, diagnose the condition of the patient, and not depend upon just the existence of one particular lesion. And I think instead of the internist cultivating the greater knowledge of surgery, that the surgeon

needs to cultivate the greater knowledge of internal medicine.

Dr. Thibault: Osteomyelitis has within the last two years become interesting to me from the standpoint of diagnosis. I had the fortune or misfortune to have five cases referred to me of the same diagnosis, malarial rheumatism. I don't know what that is, but they were all diagnosed the same way. Three of these cases turned out to be scurvy, and two of them osteomyelitis. There is a peculiar similarity in these two diseases, with the exception that the pain in osteomyelitis is more constant and not confined, at the earliest stages, to the movements of the limbs. The relation of the physician and surgeon in these matters is not any more peculiar than it is anywhere else. The relation of the physician and surgeon, the general practitioner and specialist, the doctor and patient, is simply one of common interest all the time and that's all it ever will be. If both of them have that, there never will be any friction between the general practitioner and specialist, or between the surgeon and patient. There may be a good deal between the surgeon and patient, but he will always do his duty to the patient and to whomsoever he happens to refer the patient.

Dr. Kirby: This is a very interesting paper to me in a good many ways. The doctor has brought out too much for me to take the time to discuss, but I want to emphasize his diagnosis. I have seen three cases of acute osteomyelitis, none of which occurred in my practice. Two of them had been diagnosed rheumatism, and one diagnosed erysipelas. Not that I am any smarter than other men, but I saw them at a stage in which I could diagnose the cases, and they probably could not have done so in the beginning. As to Dr. Smith's cases, four out of the eight died. I have seen three, and two out of the three died. So, I had a worse record than Dr. Smith.

One of the cases referred to above, I want to tell the peculiarity of. It was a man 30 years old, diagnosed as rheumatism in the knee and thigh above the knee. After the inflammation had existed for some time, an incision was made by the physician and considerable pus discharged and he got better. Afterwards it began to increase again, and I was called in, and I think before I could arrive at the place, four or five miles away, he made a movement of the thigh and the femur broke in two and pierced through the skin.

The other case was a young girl about 15 years old. She had trouble in the shoulder joint. I operated, as the doctor suggested, grooved the bone, and drained, etc., and she died with abscess in the liver, in a short time afterwards.

The other case had been diagnosed as erysipelas, and after he had been sick perhaps two months

or a little over, I saw him, and in manipulating the bone while under chloroform it broke in two; there was nothing but the very smallest piece of bone holding together.

In another instance, a child received an injury, and the physician saw it and perhaps set the arm in good shape, and afterwards another physician was called in and he said they had made an absolute mistake, that there was a fracture. Osteomyelitis developed from the injury, the bone broke in two, just as it did in the two cases I have mentioned, and the doctor who has had charge of the case was unjustly charged with not being able to diagnose the fracture and treating it properly. I think we, as medical men, had better be careful on that point.

Dr. Douglass: This subject is of the greatest importance to all of us, because these cases come under the care of perhaps every physician. These cases certainly represent a class in which there is no dissension between the physician and surgeon as to the treatment. There can be none. There is no question but that it is always surgical. These cases represent a class that we must diagnose early, and if there is a ground upon which we must all be responsible, it is that of diagnosis in such cases.

Whatever may be said in regard to the relations between the physician and surgeon, the physician has no excuse on earth for failing to be a good diagnostician, and herein lies the importance of recognizing these cases early. As to the mortality reported by Dr. Smith, early diagnosis is our only hope. Dr. Smith himself is an unusually good diagnostician. He very rarely makes a mistake. It can not be said of all of us. In January, a case came under the care of Dr. Blackburn and myself at Ozark. A boy, ten years old, had an accident some three months before resulting in osteomyelitis of the tibia. Fortunately the disease had not become very extensive, and the operation which we did at that time relieved him at once. He had been treated by palliative measures. Of course, his condition had not been benefited in any way at all. As I said, this condition fortunately had not become very bad, and the operation relieved him; he got well after proper surgical means.

I want to ask Dr. Smith if it is not true that these cases are tuberculous?

Dr. Dickson: As to the ultimate results in these bone infections, it is quite similar to those of infection of the softer parts. It depends a great deal upon the character of the infection. If there is a simple infection of the soft parts, recovery may be expected. Better results are obtained if the surgeon or the physician drains the part early. In bone infections, if the infection is sim-

ple, quicker results are obtained if drainage is done early. If the infection is streptococcic or mixed the worse may be expected, whether operation be done early or late. It illustrates to us, however, in operating upon these cases one thing, and that is that the doctor should be extremely careful in making his incision and in handling the wound. The doctor might have a simple infection, to start with, and, by a little carelessness in his preparation of himself, or of the instruments, or of his dressings, or in his after-care of the patient, he might infect the patient with another character of trouble which will be the cause of the death of his patient, when, perhaps, if he had let him alone Nature might have cured him. Therefore, it is important to us to do clean surgery, and thereby accomplish far better results.

It is a fact that oftentimes the slightest little injury, or merely a little abrasion of the skin will cause an infection of the soft parts, an infection of the bone, that may extend into the medullary canal, and the worst results follow because of the bad character of the infection. So we, as doctors, who are meeting these little abrasions here and there should never get careless in the management of our cases. I have seen two doctors in the past six months badly infected with the slightest abrasion of the hand. One of them died and the other came very nearly proving fatal, who had a streptococcic infection of the hand. It is a serious problem to us as physicians to be careful for our own sake, or else the worst may follow. So, the point I want to make is that the ultimate results of these cases depend very largely upon the character of the infection, and not so much on whether the doctor makes an early diagnosis or not.

Dr. Dorr: I have seen a few cases of this kind. We have two in Batesville now that go around. One is a man, 40 years old. He goes to bed, stays there for a week, and will not let the doctor touch him or have anything to do with it. The abscess spontaneously opens; he gets up and goes on the road. He has been having this condition for 20 years. The other case is in a boy who has been affected for 14 years; he never was operated upon except for an old ulcer. We operated later, after an infection of ten years, and the wound healed up nicely. I am like Dr. Dickson. It is a question in my mind whether you do much good in an early operation or not, going down in stage of acute inflammation, especially if you do more than drainage. It seems to me that there is a medical side to it. I think the same question holds good there, as in other parts of the body; we should be careful about doing too much operating in the acute inflammatory stage.

Dr. Shaw: I just got over with a very bad case of osteomyelitis. A young man about 13,

first diagnosed as rheumatism. It continued progressively, and as soon as I found the infection was in the shaft instead of in the joint, then I made my diagnosis correctly. We did not drain it early, and finally numerous abscesses developed. Finally we did drain it and had to take out necrosed bone, the tibia. I believe that was all. We drained his leg, the thigh, and his arm had to be laid open. This man went on for nearly a year before he recovered. We kept him supported; fed him on a rich, nourishing diet. That is about the only experience I have had. He is today crippled, walking upon his toes, but he is in fine health and gets around quite well.

Dr. Smith: Every one of these cases that I reported except one was treated by other physicians before I saw them. One alone was my case. So far as I remember now, every one of them had been treated for acute rheumatism. As to Dr. Dickson's question as to whether this was tuberculous or not, I didn't consider it so. I think it is an acute infection. The case that Dr. Dorr mentioned was a chronic and not an acute suppurative case, as my paper described.

Dr. Dorr: Pus ran every time, and the patient had been in bed with high fever.

Dr. Smith: The case he reports is the result always of untreated acute osteomyelitis. That is what produces these cases. These chronic cases, we see and have them all the time. I have one now, a young lady 30 years old. She tells me that 19 years ago she was in bed two and a half years from a case of osteomyelitis of the thigh. She has necrosed bone in the thigh now. I saw her three weeks ago. The first time I saw her she had a general dropsical condition, valvular lesion with albuminuria. She is going to die from chronic osteomyelitis because it wasn't treated when it was acute.

PREVENTIVE MEDICINE.*

By Wm. Crutcher, M. D., Pine Bluff.

It is required of modern physicians that they teach their patrons the principles of preventive medicine. The history and traditions of medicine, and the present advanced state of the science and art make it desirable that doctors be teachers in fact as well as in name; and the conditions and tendencies of modern life demand it. The ancient prestige and glory of medicine were

founded upon the relief of suffering. Little was known in the early days of the prevention of disease and the prolongation of life. All this is changed, largely as a result of what we call **preventive medicine**; and in spite of the most reckless wastefulness of health induced by modern social conditions, the average term of life is greater by more than a year than it was twenty years ago. It could be vastly increased by the proper use of our opportunities.

Certain things have hindered and will continue to hinder the perfect performance of this duty: First, not every one is blessed with a thorough elementary training or gifted in the use of language. Some of our best men find the art of expression a difficult one to master. Second, there is a general suspicion of the motives behind every medical suggestion. Humanity demanded a healing art, and the beginning of that art was so deficient in scientific basis that mysticism darkened and almost enshrouded it. A waning prejudice still lingers, partaking less and less of the cloud of mystery that has ever hung about medicine and medical men, and more and more of the taint of commercialism, the dominating factor in present-day life.

And then comes selfishness, the great internal disease of the medical body. Ameboid in its changes of form, andameleon-like in its variations of color, it has always been the greatest obstacle to professional unity and professional influence. We preach the principles of ethics, but we cannot command the respect to which we are entitled as a body unless we practice what we preach. Vanity and envy are human frailties upon which the people have ever played to their own advantage. A gesture, a smile, the twitch of a muscle, the lifting of a brow, have done more to hinder the progress of ethical medicine than all the quacks and charlatans of history. Of the worst form of selfishness, that which would prey upon the ignorance of the people and use their misfortunes to its advantage or another's disadvantage, perhaps the less said the better. I confess that I have had occasional reason to suspect it, and I confess also that I am ashamed to have entertained the suspicion.

Among other barriers to be surmounted are the antagonism and distrust of a large portion of the lay press, the fact that the masses know little or nothing of any kind of science, and the readiness of the people to discount our advice when is conflicts with their convenience, with preconceived notions or with habits of body and mind fixed by years of bad training and practice.

But the people are eager to learn; and there is no hinderance which can not be palliated and no requirement which can not be met, in whole or in

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part. If we come into court with thorough knowledge and clean hands, we shall receive fair treatment. We must disarm suspicion by unassuming manner and simple language. We must convince them that we speak not for ourselves but for the great body which we represent, and that what we say is for their good and prompted by altruistic motives. Forbearance will be necessary in dealing with the weaknesses of human nature, with the superstitions and false doctrines of other generations, and with the sneers of those who can see only dollars and deceit in the practice of medicine. But patience and a generous supply of sympathy will accomplish wonders in enlisting the interest and co-operation of the people.

And what may we teach them with propriety? First of all, right living. A large proportion of the diseases we see is brought about by utter disregard of the laws of health. Not only is this true of diseases of specific origin and definite course, but the number of cases of disturbed metabolism finding vent in nervous disorders, stomach, liver and intestinal derangements and lithemia is phenomenal. I fear it is growing. Nature is inexorable, and though she may tolerate an occasional infraction of her rules, persistent violation is disastrous. There is a right time to go to bed and to get up; it may vary in different people and under different circumstances, but it is fixed for each individual. The conversion of night into day with drinks, dinners and dances thrown in, is one of the sins of civilization, and the "Wages of sin is death."

Teach them the advantage of good cooking and a variety of foods, to preserve their teeth and to chew their food thoroughly; to eat at regular intervals, and not too much; to drink plenty of water and not too much of beverages. Let them understand the difference between exercise and athletics. between work and play; that excess of either is harmful, but that both are essential to the smooth performance of the bodily functions. We are rapidly developing a race of weak women. Their girlhood is unlike that of their grandmothers; and indolence, late hours, irregular eating, and constipation play a sad part in their after-lives. Plenty of drinking-water, lawn tennis, croquet, horseback riding, three square meals a day and nothing more, and a nine o'clock bed hour would render unnecessary so much medicine and so much mental science. Many bankers, lawyers, teachers, merchants and clerks do not seem to know that "all work and no play makes Jack a dull boy." They are laying up treasures, perhaps in Heaven, certainly in the Hell of neurasthenia, bilious colic, renal colic, lithemia, and other diseases of metabolism peculiar to middle and advanced age.

Teach them the proper methods of bathing and the function of the bath in preserving the health and activity of the skin, in stimulating the circulation and in maintaining the integrity of the kidney. Encourage an indulgence in fresh air and explain the difference between ventilation and drafts. I do not doubt that bright, hot sunlight is injurious to some young children, but every human being old enough to know, should know that sunlight will kill almost any germ. This leads to the necessity of a simple account of germs and their role in the production of disease. The people readily learn that germs are microscopic yeast plants, growing only when it is warm, and chiefly in dark, damp places; that just as the "mother" develops in cider, turning it to vinegar, so each microbe has a certain fondness for certain media, developing in its growth certain poisons peculiar to it. Anyone who can understand this, can understand that diphtheria is the growth of yeast plant upon the tonsil and palate developing a toxin or poison that depresses and finally paralyzes the nervous system. Upon this it is easy to base an explanation of the use of antitoxin. Upon this also as a foundation we may lay an explanation of the fact that if a germ produces any disease it always produces the same disease. Furthermore, it requires but little intelligence to understand the purpose of antiseptics, germicides and disinfectants.

People should know how to obtain potable and safe drinking-water. The effects of bad water, that wells, unless deep ones, may become dangerous, spreading typhoid fever and other germ diseases. Above all they should know the necessity of drinking plenty of water, not too cold nor at the wrong time. They should know how to select food and how to keep it, the peculiar qualities of various foods, the best methods of preparing them and the untoward effects of excess in any article of diet. Let them know the habits of flies in wandering over considerable territory, alighting now on the contents of a cess pool, and then on a nice, fresh roast just ready for the table. Of course this means the screening of vaults and kitchens; but when our patrons learn that flies hatch almost exclusively on manure heaps, an effort may be made to avoid a collection of manure, or to so spray it that flies will not alight upon it.

Mosquitoes are an avoidable pest. They not only harass people of all ages, disturbing the sleep and digestion of infants and the piety of adults, but they are dangerous. When certain mosquitoes bite persons suffering from certain diseases, they are almost sure after a definite length of time to convey the disease to other persons. Now, mosquitoes are screened against, but it would be better to have no mosquitoes, and

this is easily accomplished. They do not travel long distances. A wind may blow them from a marsh, but they dive under the grass at the first opportunity. The mosquitoes that you hear and feel are probably not from the swamp and are certainly not from a running stream, but are from your own yard or those closely adjacent. If all standing water is drained and the holes filled, if all water-troughs are emptied and sunned every other day, if all cisterns and tanks are screened, and all cans, pans, pots, bottles or crockery that may hold even an ounce of water are hauled away or protected against rain, there will be no mosquitoes.

Let us teach the people as far as we can what we know of infection and contagion, and the peculiarities of disease. It will be easier to secure their interest in vaccination, quarantine, isolation, fumigation and disinfection. Let us teach them nursing because most of our nursing will always be done by members of the family. The nurse should know why and how to dispose of the discharges of any infectious disease. She may become contaminated herself by inattention to some minor detail, such as the cleansing of her hands, or she may allow thousands to become poisoned by careless disposal of material that should be put into the sewer, entirely destroyed or thoroughly disinfected. One case of typhoid on a hill, above Plymouth, Pa., where the discharges were emptied on the ground and washed by rain into the water supply, converted the town into a combination hospital and morgue.

Let us persuade our patrons to study the care of children. Few people know that young children will stand considerable cold if not exposed to wind, and that the head may be bare if the feet are warm and dry. Fewer still protect the chest and abdomen by flannel at all seasons, seeming not to know that colds affect the stomach and bowels of infants as often as the ear and tonsil.

Now these are but illustrative points in preventive medicine. This paper is not meant to exhaust your patience or time by an effort at completeness. The subject is too vast, and I have endeavored to present only a suggestive sketch of it. I believe that every effort in the direction indicated will be well rewarded. It may reduce earnings somewhat, though I doubt it. It will improve the quality of practice, and even though we do less, we will be better paid and better appreciated. Physicians will become counselors and advisors rather than administrators of medicine. It will enhance the general esteem in which the medical profession is held. Finally, it will increase our self-respect, and bring us the satisfaction of a duty well done.

EMPHYEMA FOLLOWING PNEUMONIA.*

By E. K. Williams, M. D., Arkadelphia.

Empyema is a condition equally interesting to the physician and surgeon, and I want to say just here that I do not intend to enter into an elaborate discussion of the pathology and etiology, even were I capable of doing so, of this oft-times troublesome and puzzling disease, if I might so name or classify it as a disease; but briefly to point out some of the most salient or practical points of greatest interest.

For the past two or three years in my particular section of the country it has been my experience, and also that of a number of my colleagues, that pneumonia has been running rather an unusual and irregular course. In quite a number of cases that I have treated the past two winters, I have seen but few clear-cut, well-defined cases presenting the same familiar clinical picture as of old; indeed, as a matter of fact, it was exceedingly difficult in a number of these cases to make a positive diagnosis for two or three days.

I deem it would not be amiss to describe a few of the symptoms of a typical case of this so-called irregular pneumonia. The patient in the majority of cases, a child, is attacked in the night with a severe chill. At the first visit in the following morning the little sufferer is found to have a high fever, having already developed an acute pain in the side and expectorating considerable red blood. The pain in the side as a rule is of an agonizing nature which to my mind proves conclusively that the pleura is more or less involved.

Up to this time all the symptoms are present that might be expected in an ordinary pneumonia, especially those that might be discerned by auscultation and percussion, but this condition does not last long. After twenty-four or forty-eight hours a very different clinical picture is presented. The fever subsides and there is very much less blood in the expectoration; the patient seems to be doing well, and it looks as if convalescence had really set in and that an error was made in the diagnosis. However, after a lapse of a few hours, the same symptoms reappear, perhaps of a more intense nature, terminating in a long, tedious, pneumonia, and in the majority of instances an empyema. Whether these phenomena are to be explained as merely a co-incidence, due to the same germ or source of infection as an ordinary process, or to some strange, unheard of infection, resulting in an entirely different pathological condition, I am not prepared to say.

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In order to treat an empyema scientifically and successfully it is of paramount importance that an early diagnosis be made. If this is not done, the risk of infection and other dangers attending the operation are two-fold. Not to be able to make a diagnosis until a large quantity of pus with dyspnea are present, or an interference with cardiac action, and bulging of intercostal spaces or perhaps all the pathognomonic symptoms in this condition, is certainly not very creditable to us as diagnosticians. However, I plead guilty to have made a mistake more than once. To do so in every case, however, in matter of fact, is no child's play. I have seen a number of cases where there were absolutely no objective or subjective symptoms. At the same time large quantities of pus had been present for an indefinite time, and only after great exertion are the symptoms so patent that would lead one to suspect the real condition. So be painstaking in the examination, become skilled in percussion and auscultation. Learn that in a certain kind of irregular pneumonia where the pleuritic symptoms predominate that an effusion of some kind may be looked for, resulting eventually in an empyema.

It is a well-known and established fact, that pleural effusion, in general, is the result of an infection of the pleura and not of transudation as is commonly supposed. From the very nature of things I have absolutely no confidence in the production of absorption by blistering, local applications, purgation or the use of diuretics. In all of my cases that I shall report today, I have resorted to aspiration or paracentesis in but one case, in the others to the more formidable operation, that of resection. The shibboleth in the treatment of these cases is **drainage, drainage, drainage**, and in no other way can ample and permanent drainage sufficient to cure these cases other than resection be obtained. Even then I have had trouble in keeping the wound open a sufficient length of time. If done early before the patient is weakened or in an anemic condition the dangers of the operation, in my judgment, are very small indeed. I have never seen but one death after operation, and then the fact was never positively established that there was really an existing empyema.

Another mooted question, one that has caused a great deal of discussion *pro* and *con* and still remains unsettled, is: Whether or not it is a proper procedure to wash or flush the cavity with any sort of antiseptic fluid after the empyema has been thoroughly emptied. Why there should be such a difference of opinion I am at a loss to know. To my mind it is the only rational and sensible thing to do: I can bring to bear no reason why this should not be done as is done in other foul, stinking cavities. It has been my

practice to run large quantities of water through a return-flow drainage tube into these cavities, rendering them as thoroughly clean as possible. As there is always a lymph deposit over the pleura, I have thought that with some sort of improvised curet, that would scrape off these deposits, would not be a bad practice. In long standing empyemas with large quantities of pus, I believe it is good practice to remove two ribs instead of one. This would not only add greatly to the facility of drainage, but will add to the collapse of the abscess and the approximation of the walls, finally restoring the normal condition of the lung.

Finally, I wish to make this plea: That in my judgement, in no other way can ample and permanent drainage be secured in these cases other than resection, and that nine cases out of ten in these irregular types of pneumonia with empyema, this will have to be done.

REPORT OF CASES

Case No. 1. Maud F., ten years old, was treated for an ordinary pneumonia, but I was informed by the attending physician that, during the entire attack, she complained greatly of pain in the left side. When I saw her, about thirty days after the beginning of the attack, she had developed an empyema. I operated the following day, in this case removing two sections of rib, washed out the cavity with a large quantity of sterile water, put in drainage tube, on third day washed out again with water. The empyema continued to drain about three weeks. After this, gradually ceasing, and uneventful recovery following.

Case No. 2. This is, to me, an exceedingly interesting case. Tress E., a little boy eight years old, had what the attending physician described to me, in his own language, as a pleurisy pneumonia. When I saw the little fellow, about four weeks from the beginning of his illness, he had an enormously extended pleural cavity, from the apex to base of the lung, looked as if it might burst at any moment, and at any point. He was very much emaciated, his respiration bad, pulse very rapid, and really looked as if he might die any moment. So I advised that the patient be relieved by aspiration at once, and proceeded to do so. The little sufferer was greatly relieved, and in four or five days, I again drew off the fluid, and repeated this operation eight successive times, thinking that I would test the virtue in this, merely drawing off the fluid. Finally, the little fellow grew stronger, and feeling that he could then stand the more formidable operation of resection, so that I might get permanent drainage, I proceeded to remove one section of rib,

flushed the cavity with sterile water, and put in drainage tube. However, the empyema continued to drain for two years and ten months, and after this time, began to gradually grow less and less, and ceased altogether. The tube was removed, and the boy is now entirely well.

Case No. 3. Fred C., a fairly healthy looking young man, twenty years old, but unquestionably of a tuberculous tendency, had what was described to me by his physician as a chronic pneumonia, meaning, perhaps, that resolution had never taken place in the lungs. When I saw him the right lung presented every evidence of some sort of effusion. I advised that he be tapped, and the following day we drew off a large quantity of fluid. The operation was never repeated, and in about six months he succumbed to what was thought to be, by his physician and friends, tuberculosis. The idea has often occurred to me had I insisted on resection in order to get permanent drainage, the story might have been different.

Case No. 4. James W., a boy about six years old, rather delicate, and no doubt of a tubercular diathesis, was attacked with fever. Developing a day or so later some grippal symptoms, continued to have fever for eight or ten days with the grippal symptoms more pronounced, at intervals complaining of pain in left side. These symptoms gradually grew better until the little fellow was on his feet again. On a damp, cold afternoon, his father imprudently took him to town. He became chilled and the following night his fever again appeared, more pronounced than before, at this time developing considerable cough. This state of affairs lasted for several days, the little patient gradually grew worse, the family became alarmed, and I advised consultation. My medical friend, Dr. E. R. Dibbrel, was sent for and after a painstaking examination was very positive in his diagnosis that there was an effusion of some kind. Up to this time I was not certain of this condition. Later I became thoroughly convinced of the fact, and in conjunction with the other two physicians we heartily acquiesced in Dr. Dibbrel's diagnosis. He, of course, advised removal of the fluid. For some reason we did not attempt an operation for twenty-four hours, the awaiting however, only confirmed the diagnosis as we thought, so with a small needle I attempted to more fully confirm the diagnosis, but failed to find any fluid. By this time however, I was so certain of an existing fluid that I advised an incision, this I proceeded to do at the most desirable point making an opening one inch and a half long into the pleural cavity, but no pus or fluid did I find. The little patient died in a few hours. Whether there was an empyema, or fluid of some

kind and I missed it, possibly being sacculated, or whether we were mistaken in our diagnosis I can not say. Even until this good hour I am inclined to believe that my friend, Dr. Dibbrel, believes it was my fault that I did not confirm his diagnosis.

Case No. 8. Case of Dr. Rowland's. Miss V. C., nineteen years of age, robust, healthy young woman, had a severe chill. Ran typical course of irregular pneumonia resulting in an empyema, producing complete transposition. On two occasions he drew off large quantities of pus, put in drainage tubes, but failed very signally to get permanent drainage. He finally resorted to resection, washed out cavity with normal salt, repeating this several times, kept in drainage tubes continuously for two or three weeks. The patient finally making complete recovery and is now teaching vocal and instrumental music.

Case No. 9. E. O., a young, healthy farmer, about twenty years old was stricken with irregular pneumonia. The pain in the side was of an excruciating nature. He did fairly well for eight or ten days, in the meantime he became very ill. About this time the fact began to develop that he had an effusion of some kind. Without any preliminaries so far as aspirating was concerned, Dr. Rowland, whose patient he was, advised resection. As soon as all necessary arrangements could be made, he removed an inch and one-half of rib, a very large amount of pus escaped, the cavity was flushed several times with normal salt, a large drainage tube was placed in the opening and he made a rapid recovery, and is now working on the farm, a strong, healthy man.

Case No. 10. Hazel C. This case clearly demonstrates the fact that it is often impossible to keep the wound open a sufficient length of time to drain an empyema. In young children, especially, it is marvelous how soon the wound will close completely, with the best efforts to keep it open. This little girl, five years of age, in perfect health until her present illness, was attacked suddenly in the night with pneumonia. The pneumonic symptoms continued for about ten days; after this, she grew much better, but would have slight fever in the afternoons. All the while she complained of pain in her side. Evidently, this pain that has never been absent in a single case of pneumonia that resulted in an empyema that I have treated, is of very great diagnostic import. The fever and pain in the side continued until the end of the third week. About this time, a diagnosis of empyema was made. The parents being very much adverse to an operation, such as resection, I drew off the pus with a trocar, the largest quantity that I have seen in so small a

child. However, not getting sufficient drainage, the fever continued, and the cavity refilled. The parents at last consenting to the removal of a rib, I proceeded to resect about one inch of rib, again securing a large amount of creamy looking pus. I flushed the cavity with normal salt and put in a drainage tube. The cavity continued to drain for two weeks. The tube came out, and I found it impossible to reinsert it. The cavity filled again, and the fever came up, and a second time I had to remove a section of rib. This time, I succeeded in keeping the wound open until the recovery was complete.

(Dr. Williams exhibited a drainage tube which he devised and used in the cases reported).

DISCUSSION.

Dr. Cox: Dr. Williams ought to be congratulated and complimented for his long-short paper. The drainage tube that he used in the management of these cases of empyema I have had the pleasure of examining, and it appeals to me as being a little ingenious device, both efficient and effective, about as much as can be said of any apparatus. And his method of irrigating the pleural cavity appeals to me as being the most rational plan. I wish to compliment the doctor on this ingenious apparatus he has for drainage. It strikes me that it possesses much merit.

Dr. Dorr: While I think the doctor has a very good paper, I want to differ with him. I do not think it is necessary to resect the ribs of every child that has empyema. I never resected one in my life. I never had one that did not get well by draining between the ribs. In adults it is necessary, but certainly it is not necessary in the child. Regarding the differential diagnosis, it seems to me that what helped him out was vocal fremitus. If there is any sign that will help in making a differential diagnosis of pleural effusions, it is that of vocal fremitus. Regarding the flushing. I think it is all absolutely unnecessary to my mind. That has been my experience. I think if you just let Nature alone it will be all right.

Dr. Causey: I wish to concur with Dr. Dorr in the statement that it is frequently unnecessary to resect the ribs of children, and in the younger adults. A case in point. I had a patient 20 years old. The patient and his family objected to resection. I made an incision between the ribs, just simply pushed my finger in between them and introduced the drainage tube and flushed it a few times, and the patient went right along and made an uneventful recovery. This followed a case of pneumonia that had existed three weeks before I saw the patient, and being called into the case I made a diagnosis of empyema, and proceeded

to puncture the pleural cavity, and found quite a large quantity of pus. I think it is very advisable in these cases, where there is a great deal of pus, to use a very weak antiseptic solution.

Dr. Canfield: Dr. Cox complimented Dr. Williams, as I understood, upon some special device for drainage. If the doctor has any special device other than the mere introduction of the tube, I did not hear it in the paper. If he has, I would like to have that brought out in his closing discussion. The gentlemen seem to differ so absolutely on the necessity of resection, that I am reminded that just as horses and cattle differ in the intercostal space, so do humans. Some people have a wide intercostal space and you can get liberal drainage. Others have hardly any, and resection seems imperative. That has been my experience.

Dr. Williams: The drainage tube that I wanted to show, I passed around. This is merely a little drainage tube I have invented or devised myself. It is a double-barrel drainage tube that is put in the wound and stitches taken in the flanges to hold it in situ, rather than put in a safety pin, as is usually done. I have known of several tubes to slip into the pleural cavity, and to give a great deal of trouble to get them out. This tube is merely put into the incision and a couple of stitches taken in the flanges, and it can not get in or out, and the patient can turn in any position he wants to. It is made of rubber.

DISCUSSION.

SPECIFIC AND ASSOCIATED LESIONS IN CHRONIC INTERSTITIAL NEPHRITIS*

(This article appeared in the September Journal)

Dr. F. B. Turck, Chicago: There are so many good points in this paper that if it were read in my own society, I would feel more at liberty to criticise it more freely; but being a guest I do not care to trespass on the time of the others here. I will venture to say, however, that because a thing is good in part I dislike to see it spoiled by prolixity. The author presented some good cases which were valuable; and these cases showed some very interesting points which really ought to be brought out and dwelt upon; but in order to do this he should have simply stated what he had found. In his essay we have a mixture of etiology, physiology and symptomatology so confused together, that the good features of his paper have been considerably marred. Nevertheless it is a good paper, because it is both clear in its style and scientifically arranged. I say

this by way of explanation with the hope that you will understand that there is no desire on my part to take away from the author any credit or merit that belongs to him. It is a very important subject and was presented to us in a very exhaustive manner. Yet I would add by way of caution, that in the preparation of his treatise it would have been better to limit his remarks to those phases of the subject with which he is conversant; omitting the others where his experience is defective. Now first of all we don't know the cause of Bright's disease: we are not in position, even today, to make a positive statement on its origin, and there has been in the last few years an immense departure from the previous ideas held on the character of this disease. We no longer follow the practice of placing the kidney, the heart or the liver of a former victim of disease in a pickle jar, setting it on the shelf and then looking down upon the present patient and saying that this patient is suffering from a disease that we have here labeled and registered on the shelf. The cellular changes that we mark in the organ are not the disease itself, but the results of a process which may be of a general character and the outcome of many and various causes. It is to discover this process and even to reproduce it artificially that medical science in its new direction applies itself. No advance in medicine can be made without this experimentation. No avenue of advance is opened by mere clinical technic, history of the case or by watching its development, etc., even when we consider each case separately and afterwards put several together for comparison, because no positive conclusion results. But when we go into a research laboratory and produce these changes, observe them when they are taking place and study them in every stage of development, we are then able to draw accurate conclusions. Etiology is not the real subject of this paper; thus we should confine ourselves to pathology. The origin of nephritis as we all admit may be traced to innumerable causes, and the only way in which we can intelligently judge of the physiology, etiology, pathology, etc., of a case, is to have its general conditions if possible artificially reproduced. When we have done this, we shall learn its mode of action and thus be able to proceed intelligently.

Nephritis is not an organic disease primarily; not a disease of the kidney *per se*; but it is a general pathological condition. Dr. H. G. Wells of Chicago, injected peptones and other substances subcutaneously and intravenously and demonstrated lesions in liver and kidney, showing them to be but a part of a general process. These symptomatological conditions are also the result of a long process. How would you then go about determining how and when these patholo-

gical changes take place and of what they are decidedly productive? We have seen these same conditions in gout, rheumatism and the various inflammatory manifestations and disturbances which are due primarily to faulty metabolism and of which the kidney lesion is but one result in the general process. These conditions have been found in England, not China and Japan, where rice and fish is the staple diet, in fact only in every country where meat is an article of diet.

A potent factor of these lesions is the colon bacillus, and the same changes prevail everywhere. The colon bacillus finds in some substances derived from meat the suitable pabulum for development and produces the consequent results. In my own experiments at Chicago, which I afterwards reported before the International Congress of Lisbon, the various blood changes were exhibited in connection with the different pathological lesions; and these changes were obtained by infecting animals with extracts derived from meat with the colon bacillus. All of this corresponds precisely with what we find in the etiology of the so-called nephritis in the human subject. Injection into the blood alone will never produce it; the substance must pass through a digestive process the same as food; we can not produce it by injecting it into the blood, and it originates in the alimentary tract. The changes spoken of originate by the food during digestion, absorbed into the blood and finally distributed to different parts of the body. Moreover in clinics we have found this to be a fact, a fact that has proved itself to be of more use than all the reports of cases, and other data pertaining to their etiology. Here we might leave the field of speculation and enter into practical results of experiments.

We produced the lesions by feeding dogs extract of beef and colon bacilla. We have frequently found it to be of exceedingly great value to remove the extracts from meat by preparing it in a special manner and feed therefore extract-free beef. With many of our patients we have seen some remarkable results along these lines in treating renal lesions and their associated disturbances, gout, rheumatism, sciatica and arteriosclerosis in various stages, and hepatic and gastrointestinal disorders with their complications, besides Bright's disease. Now one point more. May we not assume that this line of experimentation draws us nearer to where the origin of this disease may be discovered? We do not assert positively that we expect certain success, but we simply state that this line of investigation promises much for the future and that the incidental results so far obtained have been of immense value. In a word we do not affect to present perfect conclusions, but it is safe to say that this form of experimentation which I have

outlined is a good basis to work upon; much better than to confine ourselves to the general aspect of the pathological and anatomical changes and depict these as in a picture before our minds. May we not predict that the therapeutics of the future will proceed on these lines and may we not hope for better success than our past methods have afforded?

I wish to compliment the author of the essay, because he has presented so much matter in handling his theme of which he seems to be a master. If I were permitted to offer any suggestion by way of friendly criticism, it would be that he has given us too much to digest at once. Yet I repeat, it is a valuable and important presentation of the subject, calculated to provoke thought and study.

Dr. Watkins: I invited criticism and got it. I think, however, I am not unable to take my share of whatever comment, favorable or unfavorable, the presentation of the subject elicited. I appreciate the fact that the paper was too long, and that there was too much involved in it; but one point which I tried to bring out, as clearly pointed out by Dr. Turck, was that we are too prone to view the condition as involving the kidneys alone without taking note of its associations. We often speak of a patient having nephritis and direct the treatment accordingly, and perhaps consider that there is nothing else involved except the kidneys. Another very important point which I tried to emphasize, was that in a case of Bright's disease cellular nephritis is not present. I pointed out that there are many things that could produce pressure, and it can be easily demonstrated that two diseases can be present at the same time, in which case it could be easily argued whether or not nephritis is the primary exciting agent. I am very glad to have Dr. Turck's support in my contention that chronic Bright's disease is not a local affection involving the kidneys only. I endeavored to hint in my paper that if treated for any length of time without taking into consideration the other phases of the conditions, failure would be the result. This at least has been my experience, and I am pleased to have had this point brought out so admirably by Dr. Turck.

Abstracts

REMOVAL OF WARTS AND WARTLIKE MOLES, ETC.—Bartscher (Journal Missouri Medical Association, for October, 1907), advises the following treatment for these conditions, and says that his experience, extending over a period of many years, justifies him in expecting an invariable cure:

In these cases I use a dressing of a one or two per cent. solution of purest carbolic acid. The application is made in the following manner (by the patient himself):—A pledget of cotton or a piece of lint of sufficient size to just cover the mole, is well saturated with a one or two per cent. solution of carbolic acid and applied to the surface of the mole; this cotton is then covered with a piece of gutta-percha tissue of such size that its edge extends sufficiently beyond the margin of the cotton everywhere to prevent evaporation; the whole is then held in position with a bandage of strips of adhesive plaster. If convenient to the patient the application may be renewed morning and evening; if not convenient, I direct the patient to apply the dressing at night and to apply a little vaseline at intervals during the day. This treatment, faithfully applied as it usually will be, will remove the mole or wart without leaving a scar.

THE DISPOSITION OF THE APPENDICIAL STUMP. (Illustrated.) By Benjamin Merrill Ricketts, Ph. B. M. D. LL. D., Cincinnati, Ohio. (Read before the Mississippi Valley Medical Association, Columbus, Ohio, October 8, 9 and 10, 1907.) "This subject is dealt with from two view points. First—The consideration of the various methods of disposing of the stump. Second—The cause of hemorrhage and its frequency. In response to circular letters sent to a number of surgeons, sixty-four replies were received representing 80,251 appendectomies, with an average mortality of seven and one-half in acute and one and three-quarters per cent. in chronic cases. Eighty per cent. of the total number of operations reported have been done by the four purse-string methods. The number of acute and chronic cases were about equal in number. The various per cent. of different techniques used is given, also the per cent. of cases in which the different ligatures and sutures of catgut and linen were used. About sixty cases of hemorrhage from the stump are mentioned, forty of which are tabulated in detail, giving eleven deaths. Of the total number of hemorrhages mentioned, all but one have resulted in the purse-string methods. The technique of each of the sixty-four surgeons reporting is given briefly. Investigation of this subject shows that many operators have abandoned the purse-string methods; that others are doing so; that simple ligature for the firm and extirpation for the soft appendix are the safer methods, and that any other than simple ligature and extirpation with linen or silk for ligature or suture should be condemned absolutely. There are five illustrations showing the vascular supply to the cecum, appendix and mesocolon, and thirteen giving the various forms of technique.

THE JOURNAL

OF THE

Arkansas Medical Society

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Edited by

MORGAN SMITH, M. D.

Secretary Arkansas Medical Society

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the State, changes of location, etc., are requested.

REMITTANCES.

Remittances should be made by check, draft, registered letter, money or express. Currency should not be sent, unless registered. Stamps in amounts under one dollar are acceptable.

ADVERTISING RATES.

A schedule of rates will be furnished upon application.

ADVERTISEMENTS.

Advertisements should be received by the 8th of the month to insure their insertion in the current issue.

CHANGE OF ADDRESS.

Change of address will be made if the old as well as the new address be given.

CONTRIBUTIONS TYPEWRITTEN.

In order to lessen liability of errors, contributions should be typewritten.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

Editorials

A CAUSUS BELLI.

"Light is the task when many share the toil"—Homer.

That the JOURNAL is receiving but half-hearted support from the members of the State Society is painfully and regrettably felt by the editor. A sufficient indictment of the indifference shown by the reportorial officers of the component societies—the Secretaries—is found in the paucity of society news appearing in the columns of the JOURNAL. The results obtained from the persistent and systematic "epistolary cork-screwing" engaged in from the 1st to the 10th of each month to obtain reports of society meetings and medical news items, are not commensurate with the energy and stamps employed, and unless the interested officers and members of the component societies awaken to this shameful condition, an organ locally representative and broadly reflective, cannot be realized in this State.

It is just as well as a pleasure, to exempt from this stricture those faithful few who have always promptly and cheerfully responded to the demands made upon them, and if it were not for their support, words of assurance, and encouragement, the JOURNAL would fail in one of its most important functions.

A case in point well illustrates the almost contemptuous indifference shown by a secretary to a polite invitation to furnish "New Items" of his society. The request sent him, read as "follows: "Dear Doctor: Please send me, at once, 'News Items' of your society for publication in the October JOURNAL, and oblige, etc." The letter was returned with the following written on the face, in blue ink: "I get one of these *things* (italics ours) every month. What is it you so preemptorily desire? Be a bit more definite, if you please." And this from the secretary of one of the largest societies in the State! All previous efforts to obtain a report from this society have proven unfruitful, and if a courteous invitation does not meet with a courteous response, it is safe to presume that unless a sense of professional or official

duty overtakes this secretary, the readers of the JOURNAL are to be denied the pleasure and profit of reading the transactions of this most progressive and important society. The State Society has done much for this society, and as reciprocity is not a bad policy for a political party it should be a good motto for a medical society.

• But this indifference to the interests of the JOURNAL is not confined to the secretaries alone. Earnest appeals and personal invitations made to many prominent and able members of the profession to come to our aid in making the JOURNAL something more than a mere "scissors-ed magazine," have not been responded to in a manner calculated to inspire hope. In one or two instances, our appeals have been absolutely ignored; in others, some excuses were framed that would not pass as a "fourth-cousin" to Truth. For instance it was planned to have the DEPARTMENTS conducted under the editorship of doctors in various parts of the State, thus endeavoring to give range and variability to the subjects contained thereunder. But it was soon apparent that a monthly change of editorship could not be depended on, for it required the same sort of "cork-screwing" to get the promised copy from the editors, as that applied to the secretaries, and as a *dernier resort*, members of the local profession were drafted upon to fill the deficiency in promised copy. The past issues of the JOURNAL will indicate those who were friends in need. The effort to preserve this plan of the DEPARTMENTS has been one of the chief causes of delay in the appearance of the JOURNAL. Space was reserved in advance for a certain amount of copy from the editors, and the forms were held up awaiting its arrival. When it was seen that it would not likely materialize, then it was that the local profession came to our assistance.

Gentlemen of the Arkansas Medical Society, the JOURNAL is yours; it is owned and controlled by you, and you alone can make it pithy, interesting and reflective according to your contributions to it and the measure of support you are disposed to give it. It has been our ambition to have the JOURNAL rank among the best

of Sate Journals, both in the high character of its original articles and the fullness of the society reports and medical news items. The editor can not accomplish this without the aid of the members individually and collectively, and there is no sort of editorial legerdemain known to him that can take the place of honest, earnest, active and aggressive support from the honest, earnest, active and aggressive members of the State Society. There is no use in mincing words or veneering the condition. It is up to you to do your duty to your JOURNAL and your Society, and this admonition is given only after a careful survey of the field.

"I would help others out of a fellow-feeling."
—Burton.

SOUTHWESTERN MEDICAL ASSOCIATION.

A successful meeting of the Southwestern Medical Association was held at Hot Springs, October 8th to 10th. The attendance was not as large as at the last meeting, but the amount of important business transacted as shown by the official minutes published in this issue, and the high character of the papers read, more than compensated for this loss in numbers. The membership shows satisfactory and progressive gain, and although this association has not yet shed its deciduous teeth, we believe the permanent set is now crowding close upon them, and it is but a question of one or two more meetings before it will be able to bite its way to a place second only in importance to the American Medical Association.

Dr. Thos. E. Holland, of Hot Springs, was elected president, and the very efficient secretary, Dr. F. H. Clark, of El Reno, reelected. The next meeting of the Association will be held at Kansas City.

District and County Societies

THE BENTON COUNTY MEDICAL SOCIETY met in regular session at Siloam Springs, October 10th, with eleven members present. A committee was appointed, composed of Drs. Rice,

Pickens, Whitcomb and Smiley, to confer with a committee of lawyers composed of Messrs. Lindsey, Dickson and Tom Williams, to arrange for a joint reception and banquet for the Benton County Medical Society and the Benton County Bar Association to be given at Rogers, Tuesday, November 12th. About fifty members are expected to attend.

Dr. F. G. Eubanks, has gone to Kansas City to attend the Post Graduate and will be absent until April 1, 1908.

Dr. D. P. Chambers, of Mason Valley, has moved to Highfill.

THE BOONE COUNTY MEDICAL SOCIETY met in Harrison, October 1, with Dr. F. B. Kirby, President, and Dr. Leonidas Kirby, Secretary. Visitors present: Dr. J. O. McFerrin, of Jasper, and Dr. M. M. Brand, of Francis.

Dr. L. Kirby read a paper on "Thrombosis and Embolism." The author emphasized the point that the physician is often unjustly criticized and even blamed for the sudden death which often occurs from thrombosis and embolism following wounds.

Dr. A. J. Vance, a member of the Committee on Progress of Medicine and Surgery, read a paper on "Gibson's Plan of Thorough Curettage of Infected Wounds, and the use of IZAL in Such Cases."

There was a splendid discussion of both papers.

Dr. R. S. Crebs, of Olvey, and Dr. J. H. Fowler, of Gaither, were elected to membership.

THE COLUMBIA COUNTY MEDICAL SOCIETY held its last meeting at Emerson, which was well attended. Malarial Hemoglobinuria was the subject discussed, and as there has been a great number of cases in that county during the summer, the subject assumed more than ordinary interest. There seemed to be no uniformity of opinion as to the treatment.

Dr. W. B. Cooksey, was elected to membership.

Dr. C. W. Brandon, has moved from Emerson to Milner, and Dr. Walter Twitty, from Taylor to Emerson.

Dr. H. L. Longino, of Magnolia, has returned from points in Texas.

THE FRANKLIN COUNTY MEDICAL SOCIETY met at Ozark, October 8th, with only five members in attendance. A list of questions prepared by Dr. Harrod was submitted for discussion. One question which elicited considerable discussion was: "In what percent of cases of typhoid fever is the eruption found?" It was the opinion of the majority that it was rarely observed, and never so often as stated by the text-books. None had even seen a profuse rash.

THE JOHNSON COUNTY MEDICAL SOCIETY met in regular session October 7th, and was called to order by Vice-President M. E. Burgess. The members present were: Drs. W. R. Hunt, president; M. E. Burgess, vice-president; L. A. Cook, secretary; J. G. Love, treasurer; T. B. Blakely, J. P. Blakely, J. L. Stewart, E. C. Hunt, J. W. Ogilvie, C. S. Allen, S. M. Graves, D. Norvell, J. R. Lowther, J. M. Cowan, J. J. Stewart and W. F. Smith.

The minutes of last meeting were read and adopted.

Drs. J. M. Murphy, J. R. Horner, G. W. L. Herrod and T. E. Burgess were elected to membership in the society, all being present except Dr. Herrod.

Clinical cases were reported by Drs. T. B. Blakely, J. P. Blakely and J. N. Ogilvie.

On motion the consideration of a uniform fee bill was taken up, the object of this meeting being to discuss the "business side" of the profession. After considering each item separately a bill was adopted.

The secretary was instructed to have a sufficient number of cards printed, containing the fee bill, to furnish each member of the society with a card.

Dr. W. F. Smith was appointed essayist for the next meeting.

The society then adjourned to meet again November 4.

THE MARION COUNTY MEDICAL SOCIETY was organized on August 13th, with Dr. J. I. Thompson, president and Dr. S. M. Weast, secretary. Application was made for a charter

through the councilor of the Ninth District, Dr. Sam G. Daniels. A charter was issued on the 15th inst., and the hope is entertained that Marion County Medical Society will prove a strong factor in medical organization.

MILLER COUNTY MEDICAL SOCIETY. Dr. J. R. Dale has returned home from a month's work and recreation in the clinics of Eastern medical centers.

Dr. C. A. Smith is again at home after having spent a most delightful summer with his family in the lake regions of New York.

Dr. Nettie Klein spent the month of August in New York City, doing work in her line at the New York Post Graduate School and Hospital.

Dr. G. C. Abell spent the summer in Philadelphia and other surgical centers.

The District Medical Society of the Sixth Councilor District will hold its meeting in Hope, Ark., some time the latter part of November or early part of December. The date of this meeting has not been fixed. Dr. C. A. Smith, of Texarkana, is president of this society, and Dr. Adam Guthrie, of Prescott, is secretary.

The Tri-State Medical Society, composed of Arkansas, Louisiana and Texas, will hold its annual meeting in Shreveport on November 13th. The indications now are that this will be the best meeting of this society that has ever been held. A splendid program has already been arranged for this meeting and a number of distinguished gentlemen from these three states have already agreed to contribute papers which assures the success of the meeting and will make it a great loss to any physician living in this vicinity not to attend. Among some of the distinguished men who have agreed to contribute papers at this meeting are the following:

Dr. E. D. Martin, of New Orleans,—“Recurrent or Chronic Appendicitis.”

Dr. Bacon Saunders, of Fort Worth,—“Chronic Infection of the Gall Bladder.”

Dr. J. P. Runyan, of Little Rock,—“Peritonitis and Its Treatment.”

Dr. C. E. Cantrell, of Greenville, President of the Texas State Association,—“Ectopic Preg-

nancy Complicating Pregnancy in the Uterus with Report of Case.”

Dr. J. O. Reynolds, of Dallas,—“Some Further Studies on the Nature and Management of Pterygia.”

Dr. G. H. Moody, of San Antonio,—“Why So Many Cases of Drug and Alcohol Addiction Recur After Treatment.”

Dr. C. A. Smith, of Texarkana, Dr. M. L. Norwood, of Lockesburg, Dr. B. E. Hendricks, of Gillham, Dr. Weaver, of Hope, and Dr. Gillespie, of Hope, were some of the physicians of the Sixth District who attended the meeting of the Medical Association of the Southwest which was held at Hot Springs the 8th, 9th and 10th of October.

THE MISSISSIPPI COUNTY MEDICAL SOCIETY will hold the next meeting at the Beall Hotel, in Osceola, on Wednesday, October 16th. Papers for the occasion have been promised by Drs. Hudson, of Luxora; Craig, of Wilson, and Stevens, of Blytheville. “As these essayists are young men of ability and promise, as well as men of their word,” so writes the secretary, Dr. Brewer, “the certainty of a program being rendered as well as an interesting one is assured.”

Dr. Thos. G. Brewer, the secretary, will review some phases of medical ethics as practiced by certain gentlemen with whom he has recently had some experience in a professional way. Dinner will be served at the Beall Hotel and a good time is anticipated.

THE SEBASTIAN COUNTY MEDICAL SOCIETY met in regular session Monday night, October 7th, with a fair attendance. Informal talks on “How can County Societies be Made More Interesting and Instructive,” were engaged in by all present, after which Dr. E. G. Epler read a paper entitled, “Sarcomatosis,” and exhibited a number of microscopic specimens showing the different varieties, all of which were of exceeding interest and instructive.

Drs. Cooper, Foltz, Ryan, Crawford and Taylor attended the Southwestern Medical Association which recently met at Hot Springs.

THE WHITE-CLEBURNE MEDICAL SOCIETY met at Searcy, Monday, October 1, with a good

attendance. Dr. L. E. Moore, President, and Dr. J. J. Moncrief, Secretary, filled their respective offices. Dr. J. C. Cleveland, of Bald Knob, read a paper on "Hydrophobia." Dr. Ward, an undergraduate, read a very interesting paper on "Pneumonia," which received much discussion. There were reports of many interesting clinical cases.

The following were elected to membership: Dr. W. H. Abington, Argenta; Dr. W. H. Bruce El Paso; Dr. R. L. Little, Judsonia; Dr. D. Edrington, Griffithville.

The next regular meeting will be held on the first Monday in January, 1908.

THE YELL COUNTY MEDICAL SOCIETY met at Danville, October 8th. Attendance the largest in its history. "A Clinical Case of Dysmenorrhoea," was reported by Drs. Leming and Montgomery, and Drs. Linzy, Worsham and McKinzie engaged in the discussion. "Burns" was the title of a paper read by Dr. J. R. Linzy, which was discussed by Drs. Madole, Leming, McKinzie and Worsham.

Dr. B. W. Madole who has had great experience in the treatment of malarial hematuria, having seen as many as forty cases in one day, gave an interesting and instructive lecture on the disease. The treatment consisted of calomel in doses ranging from 40 to 120 grains in from 2 to 4 hours after the onset; ipecac in massive doses; ergot fluidextract to control hemorrhage and sodium hyposulphite.

In the discussion, Dr. Linzy expressed the belief that ipecac and ergot would disturb the stomach very much and would give, previously, small doses of morphine and atropine hypodermically to prevent this. Drs. Harkness, Montgomery, Worsham and Leming also participated in the discussion.

Dr. H. L. Montgomery was highly complimented on a paper he read on "Nervous Diseases of the Heart." Discussed by Drs. Linzy, Worsham, Leming and McKinzie. Dr. M. A. Worsham read a paper on "Therapeutic Actions of Hydrastis." As the paper was incomplete, and the subject proved to be so interesting to the society, the essayist was invited to appear on the program for the

November meeting with the same subject. The secretary writes that this was the best meeting in the history of the society; much regret was expressed at the absence of some of the most valuable members.

Dr. G. S. Baxter, of Casa, who has been ill with malarial fever, is now convalescing.

Dr. S. E. Miller, of Dardanelle, and Dr. Robert Cowger, of Danville, attended the encampment of the State Guards at Hot Springs.

Department of Surgery

(Edited by J. P. Runyan, M. D., Little Rock.)

William S. Halstead and Herbert M. Evans (Annals of Surgery, Vol. IV., Number 4), gives a careful study of "The Blood Supply of the Human Parathyroid Glandules," and "The Preservation of the Parathyroid Glandules in Operation upon the Thyroid Lobes." The parathyroid glandules are shown to have a distinct blood supply of their own. Their preservation during operation is shown to be quite important in the prevention of the development of tetany following operation. The Mayo method of "subcapular" enucleation of the thyroid gland is recommended. Local anesthesia is advised preferably to a general anesthetic.

The importance of administering large quantities of water after operation by rectum and otherwise is advocated. Chilling or freezing the neck after operation is employed with a view of delaying absorption and thus bridging the patient over the critical period. Although used in only a few cases it was thought to be beneficial.

It is thought that the toxæmia following operation is not simply due to absorption of thyroid secretion.

News Items

PERSONAL.

Dr. J. S. Jenkins, secretary of the Jefferson County Medical Society, left on the 10th for New York, to attend the Polyclinic. He will remain in the East several months.

Dr. J. J. Moncrief, secretary of the White-Cleburne Medical Society, was a caller at the secretary's office.

Dr. M. L. Norwood, Dr. G. V. Poyner, Dr. M. Fink, Dr. Vernon MacCammon, Dr. G. S. Brown, and Dr. F. T. Murphy, members of the State Medical Board of the Arkansas Medical Society, were in Little Rock on the 8th.

Communications

SHOULD THE UNDERGRADUATE BE ADMITTED TO FULL MEMBERSHIP, IN THE COUNTY AND STATE SOCIETIES?

Little Rock, Ark., Oct. 10, 1907.

To the Editor:

Article 11 of the Constitution of the Arkansas Medical Society outlines definitely the purposes of the Society, and is as follows:

"The purposes of the Society shall be to federate and bring into one compact organization the entire medical profession of the State of Arkansas, and to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against impostion; and to enlighten and direct public opinion in regard to the great problems of state medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life."

The question now arises: What are the best methods to pursue to bring about these results?

The first thing mentioned, viz.: "to federate and bring into one compact organization the entire medical profession of the State of Arkansas" can not, in my opinion, be best encouraged by excluding a great majority by the very Constitution itself.

The second purpose, namely, "to extend medical knowledge and advance medical science" certainly is a very laudable one; but if we exclude all the undergraduates from our deliberations, the question naturally arises: Are we not defeating the very purpose for which we are banded together? If only a small percent of our profession in this State were undergraduates then this policy might be best, but certainly so long as the graduates remain inferior in number to the undergraduates, we can not hope to attain the greatest good to the greatest number by this exclusion.

The third purpose, viz.: "to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws," is one, the latter part of which, it would seem to me, we are starting at in a manner sure to invite opposition if not certain defeat when we do not ask the co-operation of the undergraduates, or rather, when we exclude them on constitutional grounds from even becoming one of us.

As to the fourth purpose, it seems to me the best way to promote friendly intercourse among physicians is to cultivate a closer county-society-relation by inviting all legalized practitioners, who are considered good enough to consult with in the treatment of our medical and surgical cases, or good enough to accept cases sent by them to us, as specialists, to become members of our society.

The problem of medical organization has probably been more thoroughly studied by the Committee on Medical Organization, appointed by the American Medical Association, than any one individual, and it is the conclusion reached by that committee that the best interests of the profession would be promoted by inviting the nongraduate to join our county societies.

We are affiliated in the American Medical Association with members who are not graduates by virtue of the fact that some states do accept the undergraduate to membership in their county and State societies. If associated with them in the American Medical Association, why not in the State society?

J. P. Runyan, M. D.

General News

AN IMPOSTER.

W. F. Baily, an optician formerly in the employment of Chas. S. Stiff, of this city, who recently set up in *business for himself*, was arrested last month for practicing medicine without license, and when arraigned before a Court of Justice, was allowed to plead guilty to the charge. Upon a promise that in the future he would confine his practice to that to which the law limits him, a nominal fine of \$25.00 and costs was adjudged against him. Whether he will be good or not, is to be seen, but we can promise him that if he does use Galenics before the State Board permits him, the hyperopic Dr. Stewart will get his lens focussed on him again and he may not escape with so light a punishment next time.

The thanks of the local profession are due Dr. Stewart for his unremitting vigilance in this, and other cases, and his efforts to clean out the horde of imposters who find this city and Arkansas generally a verdant field for plying their profession, should be strongly supported by the Pulaski County Medical Society.

NEW MEMBERS OF THE ARKANSAS MEDICAL SOCIETY.

A. M. Zell, M. D., Little Rock.
 O. G. Blackwell, M. D., Pine Bluff.
 O. W. Clark, M. D., Pine Bluff.
 T. W. Woodull, M. D., Pine Bluff.
 W. H. Abington, M. D., Argenta.
 W. H. Bruce, M. D., El Paso.
 R. L. Little, M. D., Judsonia.
 D. Edrington, M. D., Griffithville.
 R. S. Crebs, M. D., Olvay.
 J. H. Fowler, M. D., Gaither.
 C. W. Bell, M. D., Fort Smith.
 J. M. King, M. D., Fort Smith.
 J. M. Murphy, Clarksville.
 J. R. Horner, Clarksville.
 G. W. L. Herrod, M. D., Clarksville.
 T. E. Burgess, M. D., Clarksville.
 W. B. Cooksey, M. D., Emerson.

STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY.

The regular quarterly meeting of the State Medical Board of the Arkansas Medical Society was held in Little Rock, October 8th, 1907. There were 19 applicants for license, 4 of whom were colored. Of this number nine were successful, and ten failed to make the required grade. The successful applicants were:

F. B. Adair, Humphrey, Ark.
 R. F. Barker, Fisher, Ark.
 C. W. Drace, Holcomb, Mo.
 J. M. Griffin, Sulphur Springs, Ark.
 E. C. Myers, Oklahoma City, Okla.
 J. C. McLaughlin, Kansas City, Mo.
 E. E. Scott, Washburn, Ark.
 H. L. Walker, Clarksdale, Miss.
 H. B. Winters, Bayou Meto, Ark.

Of those who passed seven were graduates from the following colleges: Three, Barnes Medical College; one, University of Maryland; one, Physicians and Surgeons, Kansas City; one, University of Virginia; one, Physicians and Surgeons, St. Louis; two were undergraduates.

QUESTIONS ASKED ON EXAMINATION.

PHYSIOLOGY

By G. V. Poynor, Green Forrest, Ark.

1. What is physiology?
2. What is the function of the salivary glands?
3. What is the function of the stomach?
4. Describe digestive process beyond the stomach?
5. What is function and arrangement of gray and white matter in brain and spinal cord?
6. What is the function of the fifth pair of cranial nerves?
7. What is the function of pneumogastric nerve?
8. Describe the circulation of blood, with changes occurring en route.
9. What is the function of the spleen?

CHEMISTRY

By Dr. J. C. Wallis

1. What is chemistry?
2. What is a molecule?
3. What is an acid? Also an alkali?
4. What is an alkaloid?

5. Name four (4) most important alkaloids of cinchona.

6. What is strichnia, its test and antidote?

7. Give source of carbolic acid and its antidote.

8. Give details of two tests for sugar in the urine.

9. State how to make chlorine.

10. Give chemical formula for seidlitz powder, before and after mixing.

OBSTETRICS

Dr. M. Fink, Helena

1. Give the pathology of phlegmasis dolens.

2. Give the greatest diameter of the female pelvis, also that of the foetal head. Give the mechanism of rotation of the latter during parturition in the first position.

3. Give the most frequent causes of subinvolution of the uterus and the treatment of each.

4. Name the varieties of ectopic gestation. Give the symptoms and signs by which it may be recognized.

5. Give respectively the positive and doubtful signs of pregnancy.

6. How does constitutional syphilis in the parents affect the infant? How can you detect its presence in the infant?

7. Give symptoms of rupture of uterus and its management.

8. What steps should be taken to prevent lacerated perineum?

9. Give causes, pathology, and treatment of ophthalmia neonatorum. What serious results may follow such a condition?

10. Give the most frequent causes and treatment of mastitis.

PRACTICE

Dr. M. L. Norwood, Lockesburg.

1. Give diagnosis and treatment of torticollis.

2. Give diagnosis and treatment of Bell's palsy.

3. Give diagnosis and treatment of uncinaria nodenalis.

4. Give diagnosis and treatment of inanition fever.

5. Give diagnosis and treatment of fibrinous bronchitis.

6. Give method of modifying cow's milk for infant six months of age.

7. Give physical diagnosis and treatment of acute labor pneumonia.

8. Give early clinical and physical signs of pulmonary tuberculosis

9. Differentiate malaria from typhoid fever.

10. Give diagnosis and treatment of catarrhal dysentery.

ANATOMY

Dr. Vernon MacCammon, Arkansas City

1. At what time in development of fetus are kidneys formed?

2. Describe the scapula.

3. Give difference between a lumbar and cervical vertebrae.

4. Describe the general character of the fetal skull.

5. Name the branches of the abdominal aorta.

6. Describe the thyroid gland.

7. Describe the testicle.

8. Describe the psoas muscle.

9. Name the structures supplied by the ulna nerve.

10. Give boundaries and floor of the popliteal space.

SURGERY

Dr. Geo. S. Brown, Conway.

1. Describe the changes that take place during inflammation.

2. Give the diagnosis of fracture of the base of the skull.

3. Differentiate between septicemia, pyemia and sapremia.

4. Give the varieties of laceration of the female perineum. Describe the technic of operation for repair of one variety.

5. Give the etiology, symptoms and diagnosis of flat foot.

6. Classify wounds, and give treatment of one variety.

7. Describe acute osteomyelitis; give treatment.

8. Give the diagnosis and treatment of aneurism of the femoral artery.

9. Describe the effects on the lumbar spine of flexing and extending the diseased limb in hip joint disease.

10. Give the treatment of acute prepatellar bursitis, (a) before suppuration, (b) after suppuration.

MATERIA MEDICA AND THERAPEUTICS

By Dr. F. T. Murphy, Brinkley.

1. What is the difference between empirical and rational therapeutics?

2. Mention the diseases in which serum therapy have proven successful.

3. Differentiate the physiological action of chloral hydrate from that of opium.

4. How does nux vomica and belladonna when given with a purgative assist in its action?

5. Give medicinal dose of liq. potass. arsenitis, and treatment of arsenical poisoning.

6. Name a medicinal agent which by its physiological action contracts the arterioles, and one which dilates them.

7. From what is formaldehyde obtained, and for what is it principally used?

8. Mention the three (3) most used preparations of opium, also two alkaloids, and give dose of each.

9. From what is salol obtained, and upon what does its chief therapeutic value depend?

10. For a case of feeble heart with high arterial tension which is preferable, digitalis or strophanthus? State why it is preferable.

PROGRAMME OF THE SEVENTH SEMI-ANNUAL MEETING OF THE THIRD DISTRICT MEDICAL SOCIETY OF ARKANSAS, AT HELENA, ARK., OCT. 29-30, 1907.

OFFICERS:

W. W. Hipolite, M. D., President.

E. D. McKnight, M. D., Secretary.

R. L. Saxon, M. D., Treasurer.

COUNCILOR,

Wm. H. Deaderick, Marianna, Ark.

TUESDAY, OCTOBER 29.

Headquarters—Cleburne Hotel.

Registration of Members, 11 A. M.

FIRST SESSION: 2 P. M.

Call to order.

Roll Call.

Reading Minutes of Last Meeting.

Address of Welcome—Mayor Fink.

Response—President W. W. Hipolite.

Automobile and Carriage drive and Reception at Mayor Fink's residence, 4 P. M.

Elks "At Home" at Elks building, 8 to 10 P. M.

WEDNESDAY, OCTOBER 30.

SECOND SESSION, 8:30 A. M.

1. "A Review of the Proprietary and Nos-trum Situation," C. C. Stephenson, M. D., Little Rock, Ark.

2. "Medicine in Eastern Arkansas," T. B. Bradford, M. D., Cotton Plant, Ark.

3. "Needed Legislation Controlling the Practice of Midwifery," W. B. Bruce, M. D., Helena, Ark.

4. "Malarial Haemaglobinuria," Wm. Krauss, M. D., Memphis, Tenn.

5. "Report of a Case of Malarial Haematuria and Death," T. B. Sylar, M. D., Holly Grove, Ark.

6. Paper, [Subject to be announced later,] Wm. H. Deaderick, M. D., Marianna, Ark.

7. "Surgical Aspect of Gastric Ulcers," John M. Maury, M. D. Memphis, Tenn.

8. "Tetany Complicating Ectasy of the Stomach," Henry H. Rightor, M. D. Helena, Ark.

9. "Catarrhal Jaundice," T. J. Stout, M. D. Brinkley, Ark.

Adjournment at 12 M.

THIRD SESSION, 2 P. M.

10. "Report of one or two cases of Eclampsia," J. W. Bean, M. D., Marvell, Ark.

11. "The Sulphocarbolates," W. S. Bradford, M. D., Haynes, Ark.

12. "Cardiac Drugs and the Vasomotor Treatment," A. H. Marshall, M. D., Brinkley, Ark.

13. "The Teaching of More Throat and Ear Diseases in the Modern Southern Medical School," Richmond McKinney, M. D., Memphis Tenn.

14. Report of Cases," Sam A. Southall, M. D., Lonoke, Ark.

15. "Intestinal Obstruction from a Surgical Point of View," E. M. Holder, M. D., Memphis, Tenn.

16. "Report of Surgical Cases," Wm. Britt Burns, M. D., Memphis, Tenn.

17. A Contribution to the Pathology, Etiology and Symptomatology of Fibroid Tumors of the Uterus," F. D. Smythe, M. D., Memphis, Tenn.

18. "Fibroid Tumors of the Uterus," J. A. Crisler, M. D., Memphis, Tenn.

19. "Surgery of the Vagina with a Special Reference to Atresiae Vaginae," Allen E. Cox, M. D., Helena, Ark.

Unfinished Business.

Miscellaneous Business.

Announcements.

Adjournment.

Banquet at Lotus Club, 9 P. M.

Abstract of Minutes of the Southwestern Medical Association

Held at Hot Springs, Ark., October 8-10, 1907.

The second annual meeting of the Medical Association of the Southwest met at Hot Springs, Ark., Oct. 8th, closing the 10th, with something over 100 active, enthusiastic surgeons and physicians, with a goodly number of specialists in attendance. The papers read were of an unusually high character and were all ordered published in the different State Journals. Every session was one filled with earnest enthusiasm, and while the meeting might have been more largely attended, the quality of those attending made up for the lack in numbers.

FIRST MEETING OF EXECUTIVE COMMITTEE.

The first session was of the executive committee which met in the Arlington Hotel at 10 a. m., on the morning of the 8th. After appointing a Credential Committee, consisting of the secretary-treasurer, as ex-officio chairman, and Drs. M. F. Mount, J. R. Randolph and J. M. Proctor, and a committee to audit the report and books of the secretary-treasurer, consisting of Drs. L. H. Buxton, Geo. M. Gray and T. E. Holland, the committee adjourned to give an opportunity for this work to be done, and to meet again at 1:30 at the Hotel Eastman.

Promptly at 1:30 the committee met in the committee room at the Eastman Hotel, when the chairman of the Committee on Arrangements, Dr. T. E. Holland, made a report of the plans for the meeting. As many of the members had not yet arrived it was decided to change the program as announced, and after having the addresses of welcome, and the responses, to adjourn to take up the scientific work in sections, and to defer the reports of committees until a later session. The committee then adjourned to meet at the Arlington Hotel at 8 p. m. The evening session of the Association was dispensed with, and the members allowed the evening for social purposes.

GENERAL SESSION.

At 2:30 p. m. the general session of the Association was called to order in the auditorium of the Hotel Eastman, by the chairman of the Committee on Arrangements, Dr. T. E. Holland, of Hot Springs, Ark., who introduced the mayor of the city, Hon. M. A. Jodd, who in a short address welcomed the visitors to the city; this was followed by Dr. O. H. Burton, who in the name of the local medical society, of Hot Springs, also welcomed the members of the Association. Dr. Holland then called upon Dr. Bacon Saunders, of Fort Worth, Texas, to respond to these addresses in behalf of the Association, saying at the same time, that the governor of the State of Arkansas, who was expected to speak to us as the representative of the State of Arkansas, had been suddenly called to his home in Little Rock on account of sickness and would not be able to be present.

Dr. Holland then introduced the president of the Association, Dr. Chas. M. Rosser, of Dallas, Texas, who in turn called upon Dr. Holland to make a brief statement of the plans for the meeting.

Dr. J. N. Jackson then moved, which motion was duly seconded and carried, that the state delegations meet at 8 p. m. in the Arlington Hotel to caucus for five members of the nominating committee, one member of the executive committee to serve three years, and one vice president from each state.

Moved by Dr. Saunders, duly seconded and carried that all physicians in attendance be granted the privileges of the floor.

Meeting then adjourned until Wednesday evening at 8 p. m.

SECOND MEETING OF EXECUTIVE COMMITTEE.

The executive committee was called to order at 8 p. m., by President Rosser with the following members present: C. M. Rosser, E. H.

Carey, T. E. Holland, F. Vinsonhaler, A. L. Blesh, E. Meek, Geo. M. Gray, Bransford Lewis, L. H. Buxton, F. H. Clark.

The secretary reported that an arrangement had been made with a Mr. Oliphant to report the proceedings of all the sessions, for a consideration of ninety dollars, which agreement was ratified and the secretary-treasurer instructed to pay the bill.

The secretary then read some correspondence with the secretary of the A. M. A., and Dr. J. M. McCormack, relative to the constitution already adopted by the Association, and the present status of the Medical Association of the Southwest as one of the Branch Associations of the A. M. A., and presented a copy of the constitution suggested by the committee on organization of the A. M. A.; this was the subject of much discussion, and upon motion the whole matter was laid upon the table until a copy of the Journal of the A. M. A. of June 15th, 1907, could be secured for reference.

REPORT OF SECRETARY.

The secretary-treasurer now presented his report, which related that at the beginning of this meeting the Association had 379 members in good standing who had paid their dues for the first year. He reported also that a copy of the constitution and by-laws adopted by the Association had been forwarded to Dr. J. M. McCormack, by registered mail and his receipt received for the same, with a request that the same be carefully examined and the secretary be informed if there were any objectionable features in the same; but as no response had ever been received from the Doctor, he had presumed it was acceptable to him as the representative of the A. M. A.

The report shows that in compliance with the sentiment of the last executive committee meeting, the secretary had before planning for the present meeting, written to every member of the committee personally asking them for their vote as to whether we should have a two or three days' session, and that as the vote was almost evenly divided he had compromised by providing for a two and a half-day session.

The financial statement was as follows:

Balance on hand at last report.....	\$156.11
Received from dues since then.....	444.00
Total	\$600.11

Disbursements as follows:

Stenographer, Hotel Lee	\$ 2.50
Badges, Oklahoma City Mfg.	11.50
Banners at Hotel Lee	3.50
Miss Norton, stenographer	70.00
Printing bill	128.50
Assistance addressing envelopes	10.00
Rent of typewriter	25.00
Paid for typewriter table	4.00
Postage	177.60
Incidentals	5.62
Balance on hand	151.29

Unpaid bills:

Printing bill estimated	\$125.00
Stenographer	90.00

On motion duly seconded and carried the above report was accepted, ordered filed and the bills allowed and paid.

On motion duly seconded and carried, the secretary-treasurer was authorized to secure such services from a stenographer as he needed to carry on the work, and to pay for the same from the general funds of the Association.

Moved by Dr. Bransford Lewis, seconded by Dr. Bacon Saunders, that the Secretary read the names of all members who had joined the Association since the last meeting before the general session. Carried.

REPORT OF AUDITING COMMITTEE.

The auditing committee now reported, that they had carefully examined all the books and records of the secretary, and at his request had extended their examination back to the beginning of the Association, as they were not audited last year, and had found the figures as given in his report exact and true. They further reported that the secretary-treasurer had made no charge for stenographer, or for services in mailing over 16,000 circular letters, besides

carrying on a heavy correspondence incident to his office; for this large amount of labor of love for our Association, we believe that the gratitude of our Association is due our able secretary-treasurer.

L. H. Buxton,
Geo. M. Gray,
T. E. Holland,
Committee.

Dr. T. E. Holland now suggested that some plan be formulated that each county society should be requested to send a representative to each annual meeting.

Dr. Lewis moved, which motion was seconded, that a committee consisting of Dr. T. E. Holland and two members to be named by the chairman, be appointed to devise means to carry out the idea suggested.

Dr. E. H. Cary made a substitute motion, that the vice-president in each state be requested to carry out this work; substitute seconded by Dr. A. L. Blesh; after considerable discussion the substitute was withdrawn.

Dr. Blesh now moved that the matter be tabled and that the secretary be instructed to work through the secretary of each county society. Motion not seconded.

Dr. Saunders now moved as an amendment to the original motion, that all questions and suggestions regarding this matter, be referred to the special committee, who were requested to report at a later meeting of the executive committee.

Motion carried as amended, and Chairman appointed as such committee: Drs. T. E. Holland, F. Vinsonhaler and Bacon Saunders.

Executive committee now adjourned to meet at 5 p. m., Wednesday.

THIRD SESSION OF EXECUTIVE COMMITTEE.

The executive committee was called to order at 5 p. m., by President Chas. M. Rosser; present: Drs. A. L. Blesh, T. E. Holland, C. M. Rosser, E. H. Carey, F. Vinsonhaler, L. H. Buxton and F. H. Clark.

On motion Committee on Publication was granted further time.

On motion, committee appointed for the purpose of devising plans for the extension of the work were granted further time.

After discussing the acceptance of the constitution sent by the committee on organization of the A. M. A., motion was made, duly seconded and carried, that a committee consisting of the retiring president, the president-elect, the secretary-treasurer and one representative from each state act as a committee to attend the next meeting of the A. M. A., and confer with the house of delegates regarding the adoption of the constitution. Chairman appointed as such committee: Drs. C. M. Rosser, T. E. Holland, F. H. Clark, Jabez N. Jackson, Bacon Saunders, Chas. E. Bowers, A. L. Blesh and R. Brunson.

On motion duly seconded and carried, the question whether or not we shall meet in a general scientific session, or in separate sectional meetings at the next annual meeting, was referred to the general session to be held on Thursday morning, October 10th, with the recommendation of the executive committee, favoring the general session, the section officers to be elected the same as at present, and the same to preside over the meeting while subject and papers under their respective sections are being discussed.

On motion duly seconded and carried the secretary was instructed to have 1,000 copies of the constitution printed.

On motion duly seconded and carried, the secretary was instructed to prepare and present the report of the executive committee at the general session Thursday morning.

On motion duly seconded and carried, the section officers-elect, were instructed that in order for any name to appear on the program in the future, the paper must be in the hands of the secretary of the general association before the program is given to the publisher.

Committee adjourned subject to call of chairman.

GENERAL SESSION.

Auditorium, Hotel Eastman, October 9th,
8 p. m.

General meeting of the Association called to order by the president, Dr. Chas. M. Rosser, who introduced Dr. Wm. G. Moore of St. Louis, Mo., who delivered the address of the evening, using as his subject: "Above all the Clinician." Dr. Moore's address was of more than usual interest and was enthusiastically received by all present. At the close of the address the secretary made the announcements for the next day and the session adjourned.

Hotel Eastman, October 10th, 10 a. m.:

General session of the Association called to order by Vice-President Dr. John Punton. The president of the Association then delivered his annual address, which upon motion was received and ordered published by the secretary and a copy mailed to every member.

REPORT OF EXECUTIVE COMMITTEE.

The report of the executive committee was then presented by the secretary-treasurer; the report gave in detail the work of the Association for the past year, showing the efforts made to bring the Association to the attention of every practicing physician, who was a member of the component state Associations, and to adjust the matter of a constitution between the House of Delegates of the A. M. A., and the Association, and asked that its action in appointing a committee, to confer with the committee on organization of the A. M. A. at the next annual meeting, be approved by the general association.

Definite plans for the enlargement of the work through the county associations were also proposed; the report of the secretary-treasurer shows that at the beginning of this meeting, there was on hand a balance of \$151.29, and that during the meeting a large number of members had paid their dues which would increase this balance materially.

Unpaid bills as follows:

Ticket man for validating certificates..	\$ 23.00
Stenographer	25.00
Printing bill estimated	125.00
R. J. Crabill, Sec. Tri-State Assn.....	54.50

The report also shows that at the beginning of this session there were three hundred and

seventy-nine members in good standing and that during the meeting 45 new applications had been received, making a membership of 424 in all.

This could be doubled before the close of the present year, by a little effort on the part of each member.

The names of all members received since the last meeting are hereto attached and will be read at the close of this report.

Your committee have also carefully considered the advisability of having more general sessions, than have been held this year, and desire to have the sentiment of the Association in this matter. We recommend that the sections and section officers be retained as at present, but instead of each section meeting separately, until such time as the Association becomes much larger, we believe it will be for the best interest of the Association that the papers of each section be read before a meeting of all the members, the regular section officers of the section for whom the paper was prepared, to preside, and an opportunity for all to take part in the discussion.

We ask the Association to take such action as they may see fit regarding the above suggestion.

Respectfully submitted by order of the committee,

F. H. Clark, Sec-Treas.

Motion was now made, duly seconded and carried, after a full and free discussion, that the report of the committee as read be adopted, and that the suggestions as read be authorized.

On motion the committee asked for to meet the House of Delegates was authorized. Motion was seconded and carried.

Motion was made, duly seconded and carried, that the financial report as read be adopted, and the bills be ordered paid.

Moved, seconded and carried that the suggestion regarding the sections meeting in common, be adopted.

Moved, seconded and carried, that the secretary be instructed to add the names and addresses of all members to the constitution, when it is printed.

REPORT OF NOMINATING COMMITTEE.

The report of the nominating committee was presented. The names of Drs. Jabez N. Jackson and T. E. Holland were presented for president. The president appointed as tellers: Drs. S. C. James, F. D. Boyd and L. H. Buxton, who collected the ballots, which showed that Dr. Jabez N. Jackson received 30 votes and Dr. T. E. Holland 39. Dr. Holland having received a majority of all the votes cast was declared president for the coming year.

The chairman appointed Dr. Jackson a committee of one to escort the newly elected president to the platform, where he thanked the Association for the honor they had conferred and asked for the hearty co-operation of all the members in making this Association of great usefulness to the physicians of the component states.

The nominating committee then recommended, as vice-presidents, Dr. S. S. Glasscock, of Kansas City, Kas., Drs. S. C. James, of Kansas City, Mo., Dr. J. E. Gilcreest of Gainesville, Texas, and Dr. B. J. Vance, of Checotak, Oklahoma. For secretary-treasurer, Dr. F. H. Clark, of El Reno, Oklahoma.

On motion duly seconded and carried, the secretary was instructed to cast the ballot of the Association for each of the above named officers.

The secretary then announced that he had in accordance with the instructions cast 69 ballots for each of the above named officers.

The nominating committee then presented the names of the following as members of the executive committee to serve three years:

Dr. C. Travis Drennon, of Hot Springs, Ark., Dr. Wm. G. Moore, of St. Louis, Mo., Dr. L. H. Buxton, of Oklahoma City, Okla., Dr. J. H. Johnson, of Independence, Kas., and Dr. G. H. Moody, of San Antonio, Tex.

On motion the Secretary was instructed to cast the ballot of the Association for each of the above named persons for members of the executive committee for three years; the secretary accordingly cast 69 ballots for each person so nominated.

KANSAS CITY NEXT MEETING PLACE.

The nominating committee then announced

that they recommended as the next place of meeting Kansas City, Mo., which upon motion duly seconded and carried, was unanimously selected.

Dr. Clark, who had been elected as secretary-treasurer, having asked that he be excused from the office because of the pressure of other duties, Dr. Bransford Lewis moved, that in order to assist him in making the duty as light as possible, the Association authorize him to procure such assistance as he needed at the expense of the Association which motion was duly seconded and carried and the action authorized.

On motion duly seconded and carried a rising vote of thanks was tendered all who had in any way contributed to the success of this meeting.

On motion of Dr. D. A. Myers, the secretary was requested when preparing the program for the next meeting to place therein several blank pages for notes and reference. Motion carried.

On motion duly seconded and carried, the meeting adjourned to take up the scientific work of the sections.

SECTION OFFICERS.

The following section officers were elected for the coming year:

General Medicine—Dr. F. B. Young, Chairman, Springdale, Ark.; Dr. S. S. Glasscock, Vice-Chairman, Kansas City, Mo.; Dr. C. C. Goddard, Secretary, Leavenworth, Kas.

Surgery—Dr. Bacon Saunders, Chairman, Fort Worth, Texas; Dr. St. Cloud Cooper, Vice-Chairman, Fort Smith, Ark.; Dr. J. A. Foltz, Secretary, Fort Smith, Ark.

Eye and Ear—Dr. L. H. Buxton, Chairman, Oklahoma City, Okla.; Dr. F. D. Boyd, Vice-Chairman, Fort Worth, Tex.; Dr. J. F. Gsell, Secretary, Wichita, Kas.

ARRANGEMENTS COMMITTEE.

Chairman of the committee on arrangements for the next meeting, Dr. John Punton, Kansas City, Mo.

While the meeting was not as well attended as it was hoped it would be, yet it was so completely successful in every way that all departed saying they would surely be in Kansas City next year.

F. H. Clark, Sec.-Treas.

Monthly and Weekly Programme

Monthly and weekly program for the first six months of a four years' postgraduate course of study arranged for the use of county medical societies by John H. Blackburn, M. D., Bowling Green, Kentucky.

SUGGESTIONS FOR THE USE OF THE POSTGRADUATE COURSE OF STUDY.

1. A skeleton program for each month will be found below, followed by an "Elaborated Weekly Program" for each weekly meeting in the month. It is expected that the Secretary or Program Committee of each County Society will use this skeleton program in assigning work to the leaders or teachers. Each teacher will then find his subject outline in the elaborated weekly program.

2. Essentials to a Successful Meeting: Meet promptly. Arrange that only those who are prepared shall lead in any subject. Allow 45 minutes to teacher, if only one; 25 minutes each, if two; 15 minutes each, if three. Allow five minutes to each member to discuss the subject or to ask questions.

3. Anatomy: Discuss those structures that will undergo morbid changes as a result of the particular disease under consideration, exhibiting gross and microscopic specimens when possible. Demonstrate fresh specimens from the lower animals, if those from the human are not obtainable.

4. Physiology: Study the functions of those organs which undergo changes.

5. Pathology: Study the pathologic anatomy and physiology, and their relations to the symptoms presented.

6. Bacteriology: Study the morphology and biology of bacteria, and the methods of recognition and differentiating them.

7. Present clinical cases or brief reports, bearing on the subject, whenever possible.

8. Treatment: Study materia medica, pharmacology and therapeutics, exhibiting crude drugs and their U. S. P. and N. F. preparations. Encourage members or classes to carry out experiments on animals in regard to the effects of drugs. Emphasize the work of the Council on Pharmacy and Chemistry. Prescription writing with blackboard demonstra-

tions, should be made a prominent feature whenever practicable.

9. Reporter: It is insisted that there should be a reporter for every society, whose duty it shall be to present a digest or review of the recent literature of the subject of study for that month.

10. Adjourn promptly one and a half hours after the time for the meeting to be called to order.

FIRST MONTH.—TUMORS.

First Weekly Meeting: Anatomy and Histology. (Exhibit Microscopic Sections.)

1. Epithelial Tissue.
2. Connective Tissue.
3. Muscular and Nervous Tissue.

Second Weekly Meeting: Differential Diagnosis of Malignant and Benign Tumors.

Location, Varieties and Microscopic Appearance:

1. Fibroma, Lipoma.
2. Chondroma, Osteoma, Myoma.
3. Myxoma, Neuroma, Glioma.

Third Weekly Meeting:

4. Angioma, Lymphangioma.
5. Sarcoma.
6. Carcinoma.

Fourth Weekly Meeting:

7. Papilloma, Adenoma.
8. Dermoids, Cysts.

Cancer of Uterus.

Monthly Meeting:

Etiology of Carcinoma.

Probability of Recurrence in Sarcoma and Carcinoma.

Benign Tumors of Breast Diagnosis and Treatment.

FIRST WEEKLY MEETING.

ANATOMY—MICROSCOPIC SECTIONS.

Epithelial Tissue.—Origin, Structure, Cells and Stroma.—Varieties: Simple and compound.

Shape, Arrangement and Distribution. (1) pavement, (2) cubical, (3) columnar, and (4) ciliated. Describe ciliary motion, causes.

Transitional Epithelium: Arrangement, distribution and location.

Stratified Epithelium: Shape, arrangement and distribution.

Nutrition of Epithelium: Chemistry of epithelium.

Connective Tissues.—Origin, Structure, Function.—Areola: Distribution, structure.

Microscopic appearance cells, matrix. white and yellow fibers.

Fibrous: Distribution, structure, functions.

Elastic: Structure, distribution, histology.

Adipose: Distribution, structure, function, nutrition.

Lymphoid and Retiform: Distribution, histology.

Jelly-like: Structure, chemistry, distribution.

Cartilage: Varieties, structure, function, chemistry.

Bone: Chemistry: structure (gross and microscopic), nutrition.

Blood: Corpuscles (red and white), plasma, serum and fibrin.

Muscular Tissue.—Origin. Voluntary and Involuntary.—

Striated and Plain. Distribution of each.

Striated, Voluntary: Epimysium, perimysium, endomysium. Sarcolemma and contractile substance. Sarcomere, sarcolemma and contraction. Attachment to tendon. Nutrition of muscle. Nerve supply.

Plain, Involuntary: Distribution. Shape, size, arrangement of cells.

Cardiac Muscle: Differs from others.

Nervous Tissue.—Origin. Central and Peripheral Systems.

Cells and Fibers. Distribution.

Fibers.—Medullated: Sheath, axis, cylinder, neurilemma, nuclei, nodes of Ranvier.

Non-medullated: Transverse and longitudinal sections.

Cells: The neuron, cell body, dendrites, axite. Bipolar cells, distribution, function, description. Multipolar cells, Golgi cells, two types. Histology of the cell, staining, shape, size, etc.

Nerve degeneration and regeneration.

SECOND WEEKLY MEETING.

Differential Diagnosis of Malignant and Benign Tumors.

(1) Mobility, (2) capsule, (3) vascular supply, (4) rate of growth, (5) pain, (6) infiltration, (7) recurrence, (8) lymphatic involvement, (9) metastasis.

Fibroma: Gross and microscopic appearance, distribution.

Lipoma: Size, number, distribution, varieties, gross and microscopic appearances.

Chondroma: Varieties, distribution, gross and microscopic appearances.

Osteoma: Varieties, number, gross and microscopic appearances. Odontomes.

Myoma: Distribution, mixed tumors, gross and microscopic appearances.

Myxoma: Gross and microscopic appearances. Secondary changes.

Neuroma: Pathology, number, distribution. Ganglionic neuroma. Neurofibromatosis. Molluscum fibrosum.

Glioma; Microscopic changes.

THIRD WEEKLY MEETING.

Angioma.—Structure.

Simple Nevus: Varieties, structure of each, distribution.

Cavernous Nevus: Structure, distribution, prognosis.

Plexiform Angioma: Structure, distribution.

Lymphangioma.—Structure.

Lymphatic Nevus: Microscopic changes, distribution.

Cavernous Lymphangioma: Structure.

Lymphatic Cysts: Structure, occurrence, distribution, prognosis.

Sarcoma.—Structure, Varieties.

Round-Cellled Sarcoma: Microscopic section, distribution, age, prognosis.

Lymphosarcoma: Microscopic section, distribution, age, prognosis.

Spindle-Cellled Sarcoma: Microscopic section, distribution, prognosis.

Alveolar Sarcoma: Microscopic section, origin, distribution.

Melanosarcoma: Microscopic section, pigment, origin, distribution, prognosis.

General Characters of Sarcoma: Vascular supply, metastasis, capsule, infiltration, lymphatic supply, secondary changes, distribution.

Carcinoma.—Origin, Microscopic Structure, Varieties.

Glandular Cancer: Distribution, gross and microscopic appearances, lymph and blood vessels, secondary changes, differentiate from adenoma.

Squamous-Celled Cancer: Distribution, gross and microscopic appearances, characteristic margin, infiltration, secondary changes.

Papilloma.—Origin, Structure, Varieties.

Warts: Microscopic section, distribution, number, pigment, secondary changes.

Villous Papilloma: Structure, gross and microscopic, prognosis.

Intracystic Papilloma: Structure, gross and microscopic, distribution.

Psamomma: Structure, chemistry, location, prognosis.

Adenoma.—Structure, varieties, capsule, fluid, recurrence, infiltration, secondary changes.

Dermoids.—Structure, Distribution.

Sequestration Dermoids: Location, mode of origin, contents, prognosis.

Tubulo-Dermoids: Distribution, contents, size.

Lingual, Branchial and Rectal: Location of each.

Ovarian Dermoids: Origin, structure, contents, size, age.

Moles: Distribution, structure, secondary changes.

Teratoma.—Differentiate from dermoids.

Cysts.—Mode of Origin, Structure, Contents.

Retention cysts, tubulo-cysts, hydroceles and gland cysts.

Cancer of Uterus.—Cancer of Cervix.

Pathology—Squamous Celled: Origin, gross and microscopic changes in cervix, excrescences, degenerative changes, ulceration, excavation, extension to vagina.

Adenocarcinoma: Origin, changes in cervix, rate of growth, secondary changes.

Extension to surrounding structures. Metastasis.

Diagnosis: History, age, child-bearing. Hemorrhage, leukorrheal discharges, pain. General symptoms, cachexia, etc. Physical examination, touch, sight and smell. Differences between squamous-celled and adenocarcinoma in early stages. Microscopic examination. Method of getting specimens, staining and mounting. Differentiate normal and malignant specimens.

Treatment: Prophylactic—Repair of lacerated cervix.

Radical—Hysterectomy, probability of recurrence.

Palliative—Curettement and cauterization, medicinal treatment.

Use of X-rays.

Cancer of Body of Uterus.

Pathology: Adenocarcinoma, origin, extent of growth, degeneration, ulceration, extension through wall, rate of growth.

Extension to adjacent structures. Metastasis.

Diagnosis: Age, child-bearing. General symptoms, hemorrhage, discharge, pain. Physical signs by touch, sight and smell. Microscopic examination, only means for early diagnosis.

Treatment: Radical. hysterectomy, technic. Palliative.

Book Reviews

SURGERY—ITS PRINCIPLES AND PRACTICE—VOLUME II. In five volumes, By 66 eminent surgeons. Edited by W. W. Keen, M. D., LL. D., Hon. F. R. C. S., Eng. and Edin., Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Phila. *Volume II.* Octavo of 920 pages, with 572 text-illustrations and 9 colored plates. Philadelphia and London; W. B. Saunders Company, 1907. Per volume: Cloth, \$7.00 net; Half Morocco, \$8.00 net. W. B. Saunders Company, Philadelphia and London.

This book has 920 pages, is well printed and the plates are good—some superb. The name of Dr. Keen, together with his associates will at once command the profoundest attention, and

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PHYSICIANS MANUAL OF THE PHARMACOPEIA AND THE NATIONAL FORMULARY. An epitome of all the articles contained in the U. S. P. VIII., and the National Formulary. By C. S. N. Hallberg, Ph. G., M. D., Professor of Pharmacy, School of Pharmacy University of Illinois; Member of Committee on Revision of the U. S. P. and of the Committee on the National Formulary, and J. H. Salisbury, A. M., M. D., Assistant Professor of Medicine, Rush Medical College, etc. American Medical Association, Chicago, 1907.

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A HANDBOOK OF CUTANEOUS THERAPEUTICS. By W. A. Hardaway, A.M., M.D., Professor of Diseases of the Skin and Syphilis, and Joseph Grindon, Ph.B., M.D., Professor of Clinical Dermatology and Syphilis in Washington University, St. Louis, Mo. 12mo, 606 pages. Cloth \$2.75 net. Lea Brothers & Co., Philadelphia and New York, 1907.

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Original Articles

SURGICAL AFFECTIONS OF THE KIDNEYS.*

By F. H. Clark, M. D., El Reno, Okla.

For the purpose of convenience in considering the above subject I desire to divide these affections in two general classes, viz.:

First, medical, or those in which medical rather than surgical treatment is indicated; and,

Second, those in which surgical procedure present the greatest, if not the only hope for relief.

I am fully aware that the suggested division is of an arbitrary nature and many no doubt would take issue with me, especially when I shall place all forms of nephritis in the first division; but so far as I can learn the surgical work done by Dr. Edebohls to relieve the condition has not met with a measure of success which warrants him in recommending it unqualifiedly to the profession, and as a result surgeons generally have been very slow to adopt it. This, I believe has been the only effort made to treat nephritis surgically, and this being rather unsuccessful, we are not warranted in considering nephritis as a surgical disease, but should put it under the head of a medical one.

In considering the surgical diseases or affections of the kidney, we will divide them into two classes also, viz.:

1. Primary affections of the kidneys.
2. Secondary or remote affections.

By primary affections I mean those in which the origin or original seat of the disease is in the kidney itself.

By secondary, or remote, I refer to those in which the disease is caused by the affection of some adjacent organ or structure from which is transmitted the disease.

Under the head of primary affections we will find,

1. Calculi.
2. Pyonephrosis, or suppurating kidney.

3. Tubercular.

4. Movable or floating kidney.

It is not the purpose of the author to enter largely into the matter of operative technique, but because of the belief that very many cases that should be in the hands of the surgeon go undiscovered until in many instances it is too late to operate; not because of lack of ability to diagnose, but rather because of oversight, or because the symptoms are so masked or overshadowed by other symptoms, which from the patients statement, cause so much more suffering, that our eyes become blinded and our diagnostic judgment becomes warped and thus their troubles progress many times for months, or even years undiscovered.

Since beginning this paper I have felt that this subject is one that would possibly be more in keeping with the work of the section on General Medicine, for in the vast majority of cases it is the general practitioner to whom these patients go before they are seen by the surgeon, but after all the latter is the court of last appeal and so I will try to simply review facts which are the common knowledge of all who are members of the Section on Surgery.

I am reminded of a case seen some years since, where so far as I can recall from memory, no symptoms referable to an affection of the kidney were given by the patient who presented herself at a surgical clinic, with a suppurating sinus in the abdominal wall on about the level of the anterior superior spine of the ileum and possibly an inch and a half inward toward the median line. This was so far away from the kidney as to cast no suspicion in that direction—the history given pointing to an entirely different trouble. Exploring the track of the sinus, however, it was found to lead to the left kidney, which when seen through the incision, was found to be a large tubercular kidney, and was removed. This experience of my own and that given by many men of excellent standing leads me to feel that we are overlooking many cases which should be given surgical attention.

The symptoms of a stone in the kidney are so well known as to need only mentioning here. The

*Read in the Section on Surgery, of the Southwestern Medical Association at the Second Annual Session, Hot Springs, Arkansas, October, 1907.

first symptom is frequently a severe chill, and with very severe lancinating pains located in the region of the affected kidney, and usually radiating downward, often to the testicle or scrotum. This is easily accounted for by the connection with the nerves of the spermatic plexus. This pain is usually so severe, that unless the patient is very susceptible to anodyne, the usual dose of 1-4 grain of morphia hypodermatically, has but very little if any effect. Accompanying this condition there is nearly always obstinate constipation which requires heroic measures to relieve.

Last when we should advise operation for stone in the kidney, is a matter upon which few would agree. This, unlike gall stone, is not the result of infection, but an abnormal accumulation of uric acid or other urinary salts, and while it is claimed by many of our leading physicians that every case of stone in the gall-bladder calls for an incision and drainage, I am sure no one will contend for so radical a procedure in case of a stone in the kidney, because incision and drainage do not insure against a return of this condition. After repeated attacks of pain and when from close observation one can feel sure no stone has passed through the ureter and into the bladder, an exploratory operation, it would seem, is always justifiable and indicated.

Mention should be made of the assistance that the X-Ray gives in diagnosing these conditions, and whenever possible it should always be used in making the diagnosis.

Oftentimes the operator will be disappointed in not securing the stone. Some years ago a prominent citizen of our city was suffering from nephritic colic, and went to Chicago for operation. The diagnosis was made, the operation performed, but no stone was found. He returned to his home and after a short time began to have severe attacks of the same trouble. He went to Chicago a second time and this time the operator was more successful, finding the stone, not in the kidney or ureter, but in the bladder. It should be explained, however, that just before he left for Chicago, he had an unusually severe attack of pain beginning in the right kidney and finally traveling to the bladder at which time it was supposed the stone passed through the ureter.

Before leaving this subject I will mention the necessity for a careful differential diagnosis between stone in the kidney and stone in the gall-bladder, especially when the right kidney is the one affected. When the kidney is affected it is seldom that the patient vomits, while this is nearly always the case with stone in the gall-bladder. In kidney affections the pain usually travels downward while in gall stone affections the pain is usually referred upward and backward.

The diagnosis of pyonephrosis, or suppurating kidney, is not so easily made by the physical signs as the class of cases we have just been considering; oftentimes we may be at a loss to know what is the matter unless we bring the microscope to our assistance, carefully examine the urine, when we will be able to determine what is the cause of the trouble. Incision and drainage in mild cases, or those which will not yield to medication, and extirpation of the more advanced cases, present the only treatment, it seems to me, that is worth considering, taking into account of course the condition of the patient and whether he can stand operation.

Ureteral catheterization, of course, becomes practically a necessity to determine whether one or both kidneys are involved, and if but one is found to be affected, as is frequently the case, early operation should be urged lest the other kidney become infected and it to be unable to do its duty.

Tuberculosis of the kidney, I believe, has been more frequently undiscovered than any other of the diseases, and this because of the lack of severe symptoms in the early stages. From a most excellent paper read by Dr. M. C. Millet, of Rochester, Minn., before the State Association of that state, I shall take the liberty of quoting, because he has been in a position to secure a vast amount of valuable information from the large number of cases presenting themselves at the clinic of Drs. Mayo. He attributes the increase in the number of cases found suffering from tuberculosis of one or both kidneys to the improvement of the instruments used for this purpose; and says that during the years from 1890 to 1900 there was but one tubercular kidney case discovered in each 1,600 cases admitted; while from 1900 to 1905 there was found one case in each 350, while during these two periods the same men were making the diagnosis and the class of patients had not changed. This should open our eyes to the necessity for a very close and careful examination. When a case has progressed so far that we may find the gross symptoms, such as chills, fever, night sweats, etc., our patient has already reached the beginning of the end and we can offer but little hope.

How then may we discover this condition earlier? Quoting Dr. Millet again, "a review of these patients demonstrates only one prominent symptom present in all, viz, a day and night frequency of micturition. This symptom is usually the first one mentioned by the patient, and oftentimes is the only one complained of. Pain is rarely present at first, and if it is present points almost without exception to the bladder."

To be brief, when we find this condition what shall we do? The microscope now becomes our

reliable and practically unfailing diagnostic assistant and on it we must rely. "Many times," Dr. Millet tells us, "the search will be a tiresome one, and our perseverance will be taxed to the utmost; but if we persist we will be rewarded by finding blood, though oftentimes in very small quantities, pus and T. B.'s present." Next of course must be determined whether one or both kidneys are affected by segregating the urine and a careful examination with the microscope of the urine of each kidney, and thus the diseased may be definitely located. When this has been done what then? If the patient is in a condition where operation is safe, operate and remove the diseased member; in early operation with but one kidney affected we may feel reasonably sure of a good prognosis, but with a late operation we can not be sure of good results.

I desire to mention but briefly the last of the primary affections; viz, floating or abnormally movable kidney.

While visiting Dr. Mayo's clinic one day I asked him under what conditions he would operate upon a floating kidney, and his answer was, "only when it causes a kink of the ureter."

I asked Dr. M. L. Harris, of Chicago, the same question, and his reply was, "whenever it produces symptoms."

This condition is usually brought about in one of three ways:

1. Congenital malformation,
2. Trauma,
3. Ptosis of abdominal contents.

In considering what symptoms may be referable to an abnormally movable kidney, we shall need to be very painstaking in securing the history and to eliminate so far as possible the neurotic elements which accompany this condition. Oftentimes this is without question caused by the disordered kidney. So far as the cause of the difficulty is concerned I do not believe it makes much difference except in the case of a general ptosis of the contents of the abdominal cavity; under this condition I would not feel operation was justifiable unless we should have the ureter kinked.

A case of this character came under my observation not long since in which the right kidney was, on the first examination, easily palpable and too freely movable. Some other ailments needed attention which required the patient, who was a hard working woman, to remain in bed upwards of three weeks. When she was able to be up she complained much as before, but on examination the kidney was not so easily palpated as before, in fact it could scarcely be detected in its movement, but there was a general dragging downward of the abdominal organs which was producing this discomfort.

There is probably no surgeon who has been doing work of this character but who can recall some case or cases, where he feels positive the patient's condition was improved permanently by the replacing and keeping in place of an abnormally movable kidney, though it may not have been so freely movable as to cause a kinked ureter, yet it caused severe nervous symptoms, which were relieved by operation.

In discussing those affections of the kidney which I have undertaken to define as secondary, I will mention,

1. Those which arise from diseased ureters, and which we will term ureteral.

Probably the most common cause of this condition is injury arising from the incarceration of a calculus, which results in a stricture of the ureter. ureter-uretero anastomosis is the generally accepted procedure for the relief of this condition; but this is not always a success and when it fails, as well as anastomosis with the bowel, then removal of the kidney becomes necessary.

In fact when any affection arises which occludes the ureter permanently, removal of the kidney on the affected side, I believe is necessary. Although some surgeons tell us they have found the kidney atrophied from disuse, I should personally be afraid to trust to this.

The next secondary condition or affection to be noticed, is that of hydronephrosis, caused by a kinked ureter.

The diagnosis of this condition is sometimes quite hard to make owing to complications, when the right kidney is the one involved, and it seems to be this kidney which suffers from this affection the most. A recent case may serve to illustrate this point. Mrs. A. G., age 40, presented herself at the clinic for relief from severe paroxysms of pain in the right side. These attacks of pain were periodical in occurrence, accompanied by vomiting, and from the history taken at the time gall stone was diagnosed. The right side was more or less tender and a thorough examination was not easily made. Operation was advised and accepted.

Abdominal section was performed and two small, sharp, jagged gall stones were removed from the cystic duct where they were firmly imbedded. The right kidney was discovered out of its normal position, being displaced downward. No preparation having been made for the second operation it was not replaced at this time, hoping that by the removal of the gall stones we had removed the cause of the suffering; but this did not prove true, and soon after the operation and while in the hospital, she suffered with paroxysms of pain, though not so severe as before, unaccompanied by vomiting.

It was found also that just before and during the pain, the flow of urine would be less, and that following the cessation of the pain, there would be an increase in the amount passed.

This only goes to show how easily we may be mistaken in our diagnosis, for I am convinced that while she suffered with gall stone colic, she was also suffering all this time from the distention of the kidney due to the obstructed ureter.

This conditions calls, of course, for operative procedure and should be done early, as long continued attacks of this character produce a diseased condition of the kidney itself.

The last of the secondary affections to which I wish to call your attention, and which if not arrested may cause the removal of the kidney, is

1. Ascending pyelitis.

This may be caused in two ways:

1. By specific trouble,
2. By affections of the prostate gland in the male.

I need only mention these because in dealing with the suppurating kidney I have touched upon all that needs to be said of this trouble.

There is but one other point to be considered and that is when and when not is operation advisable.

That there is considerable shock attending the removal of a kidney, I think we all agree. It follows then that the physical condition of our patient must be able to stand the severe strain from such a shock before operation should be undertaken.

Secondly, we should never advise the removal of one kidney until we are positive its fellow is in a normal and healthy condition; for if it be affected, and there is suddenly thrown upon it twice the amount of work it is called upon to do it may not be able to stand the added strain and fatal results might follow.

This can be and is so successfully accomplished by the use of the modern diagnostic instruments, that no case need go without this definite knowledge being obtained.

Briefly to recapitulate:

1. First, surgical affections may be divided into two classes:

- a. Primary, or those arising in the kidney.
- b. Secondary, or those arising in some contributory organ.

Under primary we have,

- a. Suppurating;
- b. Calculi.
- c. Floating or abnormally movable;
- d. Tubercular.

Under secondary we have,

- a. Those arising from affected ureters;
- b. Hydronephrosis;
- c. Ascending pyelitis.

Never operate for the removal of a kidney, when the patient's physical condition is low, nor until it has been definitely decided that the other kidney is in a healthy condition.

AUTO-INTOXICATION.*

By E. T. Barlow, M. D., Dermott.

The animal organism, both in a normal and pathological state is a laboratory and storehouse for toxic materials, some of which are manufactured in the animal organism as a result of retrograde metamorphic changes, while others result from the action of bacteria in either dead or living animal or vegetable tissue. Some one has said, that we are constantly on the brink of a great precipice. We are constantly on the threshold of disease, and every moment of our lives we run the risk of being overpowered by poisons generated in our own organisms. There is then an apparent attempt at self destruction, but the safeguard to the organisms, is established through the five organs of emunction, of which the kidneys plays the greatest part, the liver acting as the sentinel to the materials brought to it, by the portal vein from the alimentary canal. The emunctory apparatus must be in a state of anatomical and functional integrity, and the circulatory and nervous systems must functionate normally, in order to avoid a condition of intoxication which is made manifest by many distressing symptoms. That I may make myself understood I deem it advisable to define a few terms that are sometimes used synonymously.

1. Ptomaines—They are albuminous compounds formed by the action of bacteria on dead animal tissue, some of which are perfectly harmless, others are very poisonous.

2. Leucomains—They very much resemble many of the vegetable alkaloids, and being formed in the animal organism as a result of metamorphic changes, are sometimes called animal alkaloids.

3. Toxins—This term was formerly used to denote certain basic substances, which are formed by pathogenic bacteria, that is, bacteria which invade and attack living organism. The toxins are very poisonous and in sufficient quantities cause death. Most pathologists and research workers give this term a more general use, applying the term to any toxic material whether generated by bacteria, or as an excrement from the highly organized animal bodies. So in this paper, the term toxins, will be used to denote poisons generated by bacteria, and also those toxic materials

*Read in the Section on Medicine, of the Arkansas Medical Society, at the Thirty-First Annual Session, Little Rock, May, 1907.

found in the tissues and different channels of the animal organism.

The greater part of the toxic materials formed by bacteria, are excrementitious substances, and are alkaloidal in their chemical make up, and it is by the action of these alkaloids on the cells of the animal organism, that gives rise to the manifestation or symptoms of disease. The one class of toxins which should attract attention as much or even more than all others, are the ones which are manifested in the destructive processes of metabolism. It is these we have to battle with, from the beginning of gestation 'till death. Toxaemia, auto-toxaemia and auto-intoxication are synonymous terms, now used to designate a surcharged condition, or in other words, an overfilling of toxins, a condition which is manifested by an increased supply of warriors known as phagocytes, whose function it is to destroy and render harmless any invading intruder.

This battle between cells and any intruder, gives rise to many manifestations of distress. Recent research by toxicologists, pathologists, and clinicians, will make a new epoch in medicine, and I believe as one man has said, "We are marching securely and calmly to the truth."

As the thing most characteristic of modern medicine is the high place given the etiology of disease, to successfully combat any foe to the animal organism, we must thoroughly understand its nature and tactics in warfare, otherwise we will be groping in the dark while the enemy is collecting its forces for an irresistible attack, resulting in the massacre of the body cells.

To a certain extent we are constantly in a state of intoxication, but as long as the kidneys, liver, skin and lungs are able to eliminate these toxic products as rapidly as they are generated, no untoward symptoms will be experienced, but when the production becomes greater than the elimination and there is greater accumulation of toxins in the system, many signs of disease are made manifest. Some organisms work with greater activity giving rise to increased secretions and excretions, while others will almost cease to perform any function.

Except the toxins produced by retrograde metamorphic changes, the toxins which have their origin in the alimentary canal are the greatest in interest to us as physicians. The modern alimentary canal is a slave for the appetite; a garbage or cess-pool, and an abiding place for many mischief-makers. This overindulgence in drink and food invites fermentation and putrefaction, resulting in the formation of noxious gases and toxins, and a great deal of partially undigested food. Often just at the time, nature provokes a diarrhea in an effort to dispose of the noxious material, but when this comes on more slowly and becomes chronic, we will have

constipation, and retention of toxins, which will be absorbed and carried by way of the portal circulation to the liver for renovation and separation, the liver acting as cleaner and purifier. Physiology teaches us that the liver is endowed with a function of rendering harmless many poisonous substances. So imagine the amount of work for the up-to-date banquet-liver, the boarding-house, lunch-counter, the bar and steamboat-livers.

Many pages might be written on the origin of toxins, but I will pass on to their effect on the animal economy. These toxic materials, which are absorbed, must be eliminated by the kidneys (which are said to eliminate two-thirds of all toxins) bowels, liver, skin and lungs.

We know also that the blood plays an important part in digesting these toxic agents. All toxic material acts as an irritant to all the cells of the body, causing either stimulation or depression, and finally organic changes. A history of diarrhea or constipation, irregular meals, overindulgence in food and drink, irregular hours, overwork, and other excesses followed by loss of, or depraved appetite, malaise, stupidity, loss of memory, aching of body and limbs, coated tongue, hot dry skin accompanied by fever, sweat and cold clammy skin, is in my opinion a fair picture of auto-toxemia.

If this condition comes on acutely, it will simulate a malarial paroxysm, and I will take the opportunity to say, that three-fourths of the conditions in this climate diagnosed as malaria are conditions of toxemia from the products of putrefaction and leucomaines from the organism itself.

How many of us are inclined to neglect details, and carelessly and indifferently impose on that quartette of conditions known as biliousness, malaria, rheumatism and grip. If the condition of toxemia is chronic, it may present a different picture from that mentioned. There may be chronic headache, chronic polyuria, continual muscular soreness and many other symptoms of the chronic "grunter." I take the position that a great many serious pathological conditions have their prime etiological factors in auto-intoxication, that is, the toxemia which causes an abnormality in the secretory and excretory functions, undoubtedly invite and offer protection to bacteria.

Among the conditions which I think are primarily due to auto-toxication, I will mention chlorosis, or green sickness. This usually occurs at the budding age of womanhood, at a time when many nervous changes are taking place, the fickle age, age of constipation, modest age, the age of law-breaking, and as a rule they are almost abstainers from water, and my conclusions are, after having treated numbers of these cases dietetically and hygienically, and not using very much

medicine, that the transgressions of natural laws at this period of life bring about an auto-intoxication which is the forerunner of this condition of chlorosis.

To demonstrate the idea, I have treated with success few cases without iron, arsenic, manganese, paying especial attention to the alimentary canal and keeping it in the best possible condition for digestion and emptying itself of the debris. Many nervous affections have their origin in a toxemia of some kind; sometimes from chronic, and sometimes following acute toxemia as a sequence to acute fevers, to return to a normal mental equilibrium after convalescence.

The "blues," neurasthenia, hypochondrias, melancholia, and many of the different forms of insanity and psychosis, such men as Dent, H. L. Palmer, Welch, Briggs, Ellison and many others have attributed as being due to an auto-infection. The old saying that man is as old as his vessels, is no doubt true. Is not this atheromatous condition of the vessels often due to an intoxication, auto and otherwise?

I grant the part played by syphilis and metallic poisons, but do we not find a great number of cases where we can exclude them safely, attributing the conditions to a chronic toxemia, especially of intestinal origin and associated with this condition? Do we not often have retinal and cerebral hemorrhages, angina, pectoris, spinal-chord lesions, interstitial nephritis? Usually middle age brings about more or less luxurious living, the circumstances and tastes of man being for over-indulgence; while the limitations of the organisms are increased, the heart and blood vessels are weakened and being overworked, consequently the inevitable result is arteriosclerosis. Why does not this all explain the high mortality, pneumonia, kidney, liver, and brain lesions of the man with old blood vessels?

The atheromatous conditions of the vessels are often neglected by physicians with the presumption that it is the natural condition of advancing years and pass the patient up on that, or probably administer digitalis or some other agent to further increase the arterial tension. Why not turn our attention to the patient's food requirements? Look after elimination and maintain a nutritional equilibrium? This will not restore the elasticity of the vessels but will remove a great deal of tension, stop the morbid process and prolong life.

It is now more generally conceded that Bright's disease is a constitutional, nutritional disorder with the kidney lesion as a local manifestation. As the kidneys eliminate two-thirds of all toxic material, it is reasonable to believe that after years of extra labor in an effort to rid the system of an overcharge of poisons, they will succumb. My conclusions are:

First, autotoxemia;

Second, arterial changes (this may be just the terminal vessels);

Third, distinctive changes in the kidneys, accompanied by a crippled heart, liver and spleen. There are many other forms of nutritional disorders as some form of rheumatism, asthma, gout and neuralgia. Right here is a great big field of which I have just laid down the bars but will not enter.

Auto-intoxication manifests itself in various ways; some patients refuse to eat, others will be restless and can not sleep well; headache, backache, becoming tired after little exertion; usually have a yellow skin and think themselves "bilious."

For the past twenty years the bacteriologists have worked almost incessantly studying the morphology of bacteria; their habits, the conditions most favorable for their production, the contriving of means for their destruction.

At the present time many men have taken up the work of studying the means for maintaining the metabolic equilibrium, thereby keeping the organism in the best possible condition that it may resist an invading enemy. If more time was spent in an effort to disarm bacteria by building a wall of defense, which can be done by living according to natural laws, less will be the need of drug therapy. I believe that in the future longevity will be increased, and that man will look upon death not as a horror but a day of delightful rest.

Why not all search for that fountain of almost perfect youth and be centenarians at least?

DISCUSSION.

Dr. Canfield: I think in this paper Dr. Barlow has sounded the key-note not only of self-preservation, but of prophylactic medication. The importance of this subject has been overlooked constantly, and is only recently coming to the front. I do not wish to discuss the paper much, because it speaks for itself, but to simply say to him how much I appreciated the paper. I think there is one factor that contributes towards the accumulation of waste that he hardly dwelt upon enough, and that is the tendency of these middle-aged and older aged individuals to cease their physical activities. That is probably an important contributing factor in waste accumulation in the body. I don't know whether we are going to overcome some of these results of auto-intoxication by some such method as Metchnikoff has been for years advocating and practicing himself. The trash we eat, the imperfect mastication, the absolute violation of every law of common-sense living, is a matter of every-day observation, and we as physicians need to stand for better living.

Dr. Archer: I enjoyed the paper very much. It is a good one. It expresses my views pretty closely. I think if we will pay more attention to the alimentary tract, and educate the people a little more along that line, which is the real seat of the trouble, I think we will get along better. That certainly is a good paper, and in mentioning along the line of biliousness, "blues," etc., it is an absolute fact that if you take a man who has the blues, if you examine his urine, you will find indican in there strongly. Indican is the by-product of faulty metabolism. I think we will soon come to pay more attention to the alimentary tract than we have heretofore; that we will look more closely to that one point. I think it is coming.

Dr. Barlow: I am very much disappointed in the discussion of this paper. I don't claim much for the paper, but I thought I would get the Society aroused on this subject because I think it is one of very much importance. I expected to be called down on one proposition that I laid down in the paper on the subject of malaria. I live right in the swamps at Dermott. In the last two years I have studied every case of fever microscopically. I want to say to you that I believe honestly that three-fourths of the so-called malaria in the southern country is auto-intoxication. I don't believe any man can diagnose malaria without a microscope. Whenever you fail to find any change in the body of the cells and fail to find the malarial plasmodium, I don't believe there is any malaria there. You take those very cases; I have seen them with the chills, sweat and the fever; put that man upon eliminative treatment, where you examine the blood and find no parasites or no changes, and that man would get well under the eliminative treatment, and would not have a recurrence of that attack. I had several cases. One I remember. He had the typical malarial paroxysms, because I was with him at the time he had the chills. I got there before he got through having the chills. He shook, and vomited bile, and had high fever running up to 104, and then a sweat. That is about all I have to say.

TREATMENT OF GONORRHEAL PROSTATITIS BY ACETELYNE GAS.

By A. U. Williams, M. D., Hot Springs.

In presenting this paper I am aware of the fact that, "one swallow does not make a summer." The success of the treatment employed in the case related below, justifies further experiments with the remedy used.

I shall not take up your time with the pathology or history of gonorrheal prostatitis, only so far as it relates to the history of this particular case.

February 21st, T. V. A., adult, 30 years, applied to me for treatment for enlargement of the prostate gland. He gave the following history:

Two months previous he had gonorrhea. No urethral discharge at the time of examination. Some shreds in urine, increased frequent desire to urinate, more or less painful, complained of soreness in perineal region. On examination the left lobe of the prostate was found to be considerably enlarged and quite tender. Slight enlargement of the middle lobe. Right side almost normal. Massaged prostate gently, prescribed cystogen and iron.

Feb. 23rd, massaged gland.

Feb. 25th. Urethral discharge appeared. This was after I had massaged the gland twice.

I had read in the Journal of the American Medical Association an article from some physician, whose name I am sorry that I have forgotten, on the treatment of obstinate cases of gonorrhea with acetylene gas, and it occurred to me that this would be a very appropriate case to try the gas treatment on.

March 2nd. I gave first treatment of gas. This was repeated at intervals of one and two days until seven treatments had been given. The prostate was stripped every three or four days.

After the fifth treatment with gas the discharge almost ceased. Improvement of prostate was noticeable after the second treatment and the improvement continued. In the beginning of the third week the swelling and soreness of prostate were practically all gone. The use of the gas was followed by no unpleasant symptoms.

The apparatus used was an ordinary wide mouth one-gallon glass bottle, six feet of small rubber tubing, and a glass nozzle with a blunt point. Care should be taken not to hold the nozzle too tight in the urethra when the evolution of gas is the strongest. As the strength of the evolution subsides, all of the gas can be forced into the urethra, no harm resulting from its passage into the bladder. The jar should be about one-third to one-half filled with water, and a small piece of carbide, about the size of the thumb, dropped in at a time. This should be repeated from time to time with the crude, improvised apparatus I used, until the treatment has been continued for ten to twelve minutes.

DISCUSSION.

Dr. Thibault: I would like to ask Dr. Williams how long it is after he uses the acetylene gas treatment before he can occupy his office again. There is nothing to my mind that smells more offensive than acetylene gas. I think after a

*Read in the Section on Surgery, of the Arkansas Medical Society, at the Thirty-First Annual Session, held at Little Rock, May, 1907.

fifteen minutes treatment it would be far from a pleasant place to stay in.

Dr. Hays: This is an exceedingly interesting paper to me. I saw the original article to which Dr. Williams refers, or one very similar to it. If I recollect rightly the essayist did not complete his summary as to conditions in the prostate. He did not state whether he made a microscopical examination to find if there were any diplococci present, or if they appeared in the first irrigation. To prove the efficacy of any remedy or treatment of the character described it would take a long series of cases, and might not be the same in all; and it would be necessary to describe the extent of the cases, to prove whether or not the same result would follow. The same result might be obtained by simply stripping and massaging the prostate and not use any local treatment. That would prove whether acetylene gas was a factor in the procedure. I would like to have it experimented with a little further to demonstrate if better results are obtained from acetylene gas than nitrate of silver. You could say, then, whether it was a specific in killing gonococci, if you accomplish the same result. Furthermore, the gas, of course, would not do any harm by passing into the bladder, and it seems to me it would be better to use a special tube of hard rubber; in other words, to use either an elbowed catheter, or a tube soft enough to pass through the urethra without involving the prostate. I think, however, before we should report the cure of a case by this method, we should have a series of cases as a basis.

Dr. Hatchett: I have been much interested in the method of Dr. Williams in treating this most troublesome of complaints. It seems very ingenious. It is the first I remember having seen on the subject. I should be very happy indeed to find such an efficacious remedy. The theory upon which Dr. Williams bases the treatment, I believe is very good. I assume his theory is that the gas will open up the follicles of the prostate gland and empty them. If he does that by this method, I think it is better than the one suggested by my friend. If you introduce the tube into the top, it would not have the ballooning and dilating effect, as when you introduce the gas anteriorly; consequently, the cavities of these parts would not be opened as deeply as they would if introduced anteriorly. If this method should prove to be a success, it is certainly a godsend.

I do not live at Hot Springs and I do not find perhaps as much of this kind of work to do as the gentlemen at that famous health resort; but it has been my fortune or misfortune, to have had a great deal of this sort of trouble to contend with, and I assure you there is nothing that gives me more trouble than the treatment of prostatitis and urethritis, with their consequent complica-

tions. I have now a few patients on hand who have actually been under treatment for ten or fifteen years. I do not think they will ever get well until the daisies blossom over the little mound that covers them.

If there is any method by which the follicles of the prostate gland could be opened up and irrigated, with an antiseptic, to carry off whatever infection there may be in them, we would then have some hope of curing these cases. If by any means we could introduce some kind of an instrument into the seminal vesicles by which they could be irrigated and sterilized, I would then have more hope of curing these cases. You can strip the follicles and massage the prostate, and you can rid these organs of their contents to a degree, but still there is some infection remaining, and it is not necessary that the infection shall be diplococcic or gonococcic. After a long time, perhaps a number of years, the cocci would at least lose their virility and die out. Specimens obtained by stripping the follicles and massaging the prostate, microscopically show no gonococci, but always broken down cells, transitional cells, deformed spermatazoa, etc. These patients frequently have no external discharge. They do not know they have prostatitis; but a specimen of urine will show the sharp, flattened, comma-shaped pledgets of pus that come from the follicles.

I presume that I could stand here and talk to you until sundown upon my experience with these troubles; but I do not know that I could enlighten you any. I get despondent over these things and so do the patients. It is a fruitful source of a great chain of nervous troubles that are exceedingly troublesome and bothersome. If Dr. Williams' treatment proves in any degree a success. I will regard it as a very fine thing, and I am going to try it.

I wish to say that the very best method I have ever found and practiced, is to fill the bladder with a mild antiseptic solution. I use nitrate of silver, one-tenth grain, massage the vesicles and prostate, then have the patient empty his bladder. This will soothe the parts and possibly some of the antiseptic will gain entrance into the follicles and reach the deeper-seated infection. After that a deeper instillation may be made of a strong solution of nitrate of copper, or some other astringent. I have had better success with this than anything else.

Dr. Williams: I probably should have apologized for reporting only one case. I have not had an opportunity until day before yesterday to repeat the experiment. I have another case under treatment which I hope to be able to report in detail to this society at some future date. If it does as well as the last case I shall certainly be glad to report it.

In reply to Dr. Thibault, as to how long before I could use my office, I will say that after using the gas if you have plenty of ventilation, the fumes will pass away in a short time.

I made no microscopic examination of the discharge in this case for there was none, and there had not been any for some time before I saw him. After I had massaged the prostate, there was a profuse discharge from the urethra, continuing for three or four days.

In the case referred to in the JOURNAL, there was a short article of about ten or twelve lines from some physician in Mexico, who reported the treatment of two cases of obstinate gonorrhea, cured by one or two injections of acetylene gas. In one case, only one injection was used; and in the other, two. There need be no fear of the gas penetrating the bladder. It does no harm, but comes right out again.

I do not know whether the gas cured this patient or not. Any one who has treated these cases knows that they are liable to give you trouble before you get through with them.

I have in mind an apparatus for the production of the gas, and am now constructing one according to my own ideas. I think it would be an easy matter to construct an apparatus to enable one to administer the gas very effectually with a one-gallon bottle. The gas could be held under moderate pressure and it would be more satisfactory to the physician. I hope you will try the treatment, and that in your cases it will prove as highly efficacious a remedy as it did in mine.

SUPPLEMENTARY REPORT OF A CASE OF FRACTURE OF THE SPINE.*

By C. J. March, M. D., Fordyce.

This case was reported to the 1905 meeting of the Arkansas Medical Society in this city. On account of my absence from the meeting, the report was read by my friend, Dr. F. E. Harrison, of Fordyce, but under the rules, was not discussed.

I wish now merely to report the condition of the patient at the present time, three years and four months after the receipt of the injury. I think it interesting and profitable to follow up these cases as far as possible, as only in this way can we get a proper estimate of the value of treatment or of the different methods of treatment.

This case was treated conservatively with good results. At present the patient can walk fairly well, with only a cane, can drive a team alone, can do light farm work and superintend his business affairs generally. Considering his condition

immediately after the injury and for about a year thereafter, he shows gratifying improvement during the past two years. There is still some paralysis of the extensor muscles of the left thigh, but he says that he is slowly and steadily regaining control of those muscles. As to the effect of the injury on his sexual powers, he is now entirely competent in that respect. The object of this report is to draw out expressions of the experiences of others who have had similar cases.

DISCUSSION

Dr. Kittrell, Texarkana: Dr. March's report is very interesting to me for the reason that only recently, in association with Dr. Smith, of the Cotton Belt Hospital, I saw a case of fracture of the vertebra with contusion and much laceration of the cord. Immediate operation, which should be the rule in such cases, was not done for the reason that early consent of the relatives could not be obtained. We operated by doing a laminectomy and afterwards putting on a plaster cast. The wound healed by primary union. Motor paralysis present. The patient has now been confined to his bed for three weeks, and there is no improvement in sensation or motion below the point of the injury.

Dr. March said he had nothing further to add.

REPORT OF AN INTERESTING CASE.

By D. T. Wilson, M. D., Hampton.

On September 10th, 1905, there came under my observation a child, female, 11 years old, whose previous health had always been good. She was well developed for her age, having always been above the average in size. Examination revealed an enlargement resembling an abscess located near the free end of the twelfth rib. Her parents stated that the present trouble started in the left ankle, afterwards moving to the knee, thence to the groin and to the place where it was located at the time my examination was made. From the latter place it moved to a point just above the left nipple where it "formed" as before. A small opening appeared in the center of the swelling from which a worm was pressed out.

During the months of October and November several similar boil-like enlargements appeared on different parts of the body with the same pin-hole in the center, but no worms were discovered. In December another enlargement appeared over the shoulder blade which, for purposes of observation, was allowed to run its course, and in six days another worm made its appearance. The

*Read in the Section on Surgery at the Thirty-first Annual Session of the Arkansas Medical Society, held at Little Rock, May, 1907.

patient was free from any further trouble until March, 1907, when another enlargement containing a worm made its appearance. One other enlargement followed this one, but a worm was not discovered.

The worm is white, about one-half inch in length, gradually tapers towards both extremities and has several band-like constrictions around it. In general appearance, it resembles the "meat-skipper."

The swelling resembles an ordinary boil and begins with a slight redness and elevation of the skin, becoming tender and painful on pressure. At maturity the enlargement is about three inches in diameter, with pointed apex, in the center of which is an opening from which the worm makes its exit. After the worm is expelled, the swelling and inflammatory products soon subside, leaving only a small induration to mark the seat of the former trouble. The health of this child has at no time been impaired, and excepting the applications of antiseptic lotions, has had no treatment.

DOUBLE PNEUMONIA WITH COMPLICATIONS.

BY NORBORN H. JACKSON, M. D., PONTOON.

The uncommon occurrences of life are those that attract our attention the most and make us anxious to report them to others in order to gain council, to guide us in the future, or sustain us for that which we have done in the past. I offer this as my excuse, if one be needed, for presenting to you today simply a clinical picture of bed-side experience through which I have passed a short time since. I shall try to be accurate and concise.

I was called April 27th to see a Miss S——, age 24 years; complexion, blonde, strong physique; average weight, 145. When I entered the room my first impression was that I had a patient with asthma. She was propped up on pillows breathing with much difficulty, suffering greatly, and seemed to be worn completely out from her exertions. There was lividity of countenance, with excited and anxious look. Her pulse was very fast, temperature above 104 (from memory as no notes were taken at the time). I elicited from the mother that she had

been ill for several days, but had not taken her bed until the day before, present condition starting with a chill, a few hours previous to my call.

I found on examination both lungs congested, stomach and liver tender on pressure, the spleen greatly enlarged and hard and extended beyond the median line. Her tongue was coated with a heavy yellowish white coat, except at the point, which was red, and inflamed. From these findings, my diagnosis was double pneumonia, super-added to chronic malarial toxemia.

A hypodermic injection of morphine and atropine was given for relief of pain, a mixture of calomel, soda, and Dover's powder to be followed in six hours, if needed, by a saline cathartic to move her bowels, quinine every four hours, with hot applications to be continuously kept on chest, and spleen. I left my patient with misgivings, that I might find a corpse at my next visit, but to my surprise the next morning she was quite comfortable, temperature 102, breathing much improved and she had assumed the recumbent position, in fact a radical change generally had taken place.

This patient was carried through all the stages of pneumonia nicely, under good nursing and such treatment as symptoms demanded, her temperature ranging from 102 to 103½. The tongue was generally moist with no dark coat, nor was sordes deposited on teeth or lips. On the tenth day from my first visit, the patient was without fever, but very weak. I directed the continuance of quinine and strychnia every four hours and told the mother that by proper care in nursing and feeding I thought there would be no trouble, unless from the spleen, which had remained large and hard. That later when she was stronger, I would provide treatment to try and reduce it.

Now then, gentlemen, comes the part of this paper that caused me to write it. So many of the profession remark, "Chills are nothing, quinine is a specific." I had trouble, great trouble at that with this patient, and if it had not been for that powerful form of which I have spoken. with great endurance, and vitality, I feel sure

*Read before the Fourth Session of the Eighth District Medical Society, held at Dardanelle, August 26-27, 1907.

the *chills* would have robbed me of her. For as you all know pneumonia within itself is one of our most fatal diseases. I was called back to her the second day on account of a chill, and for eleven consecutive days she had a chill despite all my efforts to stop them. I went before chill time to make sure my medicine was given. The treatment at this time consisted of minute doses of calomel repeated at intervals, for my patient was very weak, quinine in increasing doses, with oil of pepper to insure absorption; the effects were evident by ringing in the ears, of which she complained greatly, artificial heat to extremities, local application of biniodid of mercury to spleen, which was still hard, and painful. The treatment seemed to be of little avail for she was sinking with each recurrence of the paroxysm. On the 20th of May, twenty-one days from my first visit, she was perspiring freely, temperature 105, thoroughly under the influence of quinine, she commenced to shake, and the chill lasted nearly an hour. My cyanosed, and suffering patient now looked as if she might die at any time, and I determined if she should live, to try at least to ease her suffering as much as possible on the morrow. With this determination when the next chill time approached, I had her well under the influence of morphine and atropine. She slept heavily—the effect of the atropine was noticeable in her face and the colliquative sweat to a great extent controlled, no chill, temperature 100. The next day the same treatment was given, temperature under 99. Within twenty-four hours she commenced to ask for nourishment, and improved rapidly on tonics, and alternative treatment. She regained her accustomed health.

Was malarial toxemia the sole cause of these chills?

ACUTE GASTRO-ENTERIC INTOXICATION.*

By A. H. McKenzie, M. D., Dardanelle.

Mr. President and Gentlemen of the Society:

In endeavoring to read a paper before you today, I do so, with some hesitancy, knowing

full well that I have nothing new, and feeling confident that you already are familiar with all that I shall say, and my only object is to cause a more careful study and review of the subject.

This form of diarrhea which is so prevalent in summer, stands midway between acute indigestion and ileo-colitis. Among its causes are to be mentioned; first, those which give rise to acute indigestion; second, the general factors mentioned as predisposing to all forms of diarrheal diseases—age, surroundings, constitution, food and methods of feeding.

The action of heat in producing diarrhea was formerly regarded as a direct one. Severe cases were looked upon as examples of heat-stroke or thermic fever, but if so they must be extremely rare. Despite the many series of bacteriological studies by physicians in this country and Germany, our knowledge of this subject is yet very incomplete.

So far as is now known, no one form of bacteria can be assigned as the cause of this group of diarrheas. Clinically, there are two forms of gastro-enteric intoxication, viz: Simple and true cholera infantum.

Attacks of acute-enteric intoxication cannot always be distinguished from those of acute indigestion, but as a rule they are characterized by a higher temperature, greater disturbance of the nervous system, very offensive stools, and by occurring epidemically in summer.

To differentiate these cases from those of ileo-colitis, may be impossible for the first two or three days. The continuance of high temperature beyond the third day points to inflammatory changes; so also the appearance of blood and much mucus in the stools, and the existence of continuous pain.

Prophylaxis.—Maternal nursing if agreeable to the child should be encouraged by every possible means, but overfeeding is particularly to be avoided during days of excessive heat. Diminish each meal by one-half, make up the deficiency in water, and give water freely between the feedings. All water given to infants or young children should be boiled. Infants cry more from thirst and heat than from hunger, and even those at the breast are likely to

*Read before the Fourth Session of the Eighth District Medical Society, held at Dardanelle, August 26-27, 1907.

be given too much food. For all diarrhea cases in summer fresh air is of the utmost importance. With high fever or prostration, these cases always do better if kept out of doors the greater part of the day. Nothing is so depressing as close, stifling apartments. Children should be kept quiet and especially should not be allowed to walk even if they are old enough and strong enough to do so. The clothing should be light and consist of single loose garments. Linen or cotton may be put next to the skin if this is very sensitive and there is much perspiration. Bathing is useful to allay restlessness as well as for cleanliness and the reduction of temperature.

Scrupulous cleanliness should be secured in the child's person and clothing. Napkins, as soon as soiled, should be removed and placed in a disinfectant solution. Excoriation of the buttocks and genitals are to be prevented by absolute cleanliness and the free use of some absorbant powder, such as starch and boric acid.

Medicinal and Mechanical Treatment.—It must be borne in mind that we are not treating an inflammation of the stomach or intestines, although such may be the result of the process. The essential condition, it should be remembered, is one of acute intoxication arising from the intestinal contents—food-remains, from arrested digestion, altered secretions, acids and other toxic substances produced by bacteria, to which not only the constitutional symptoms, but the local lesions are chiefly due. Here let us assist nature. If too much food be swallowed, the appetite is taken away; by vomiting the stomach is emptied; to neutralize the acid poisons in the intestine, alkaline serum is poured out from the intestinal walls; to remove irritant poisons, increased peristalsis is excited. If the initial vomiting has not emptied the stomach effectively, wash it out, or as a substitute for stomach-washing, copious draughts of boiled water may be given. This is taken readily, and as it is usually vomited almost at once, it cleanses the stomach thoroughly, but is inferior to stomach washing. To clean out the small intestines, cathartics are available. For the colon, we

may in addition employ irrigation. Calomel, castor oil, or salines may be used as cathartics, and enough of any one of them must be given not simply to move the bowels, but to clear out the intestinal tract thoroughly. I prefer castor oil, when the stomach will permit it, and calomel where the stomach is irritable. Thorough initial evacuation, almost no food, but plenty of water (boiled) for twenty-four hours, and careful feeding after that time, is all the treatment that is necessary in a large number of cases. Bismuth rarely causes vomiting, and most of its preparations can be given in large doses. Salicylate of soda, if stomach is not irritable, may be given. Alkalies are of value only in the acute stage where there is acid fermentation with vomiting and eructations of gas. In the later stages and sabacute cases, dilute hydrochloric acid, from one to three drops, may be given. Lime water, bicarbonate of soda, magnesia or chalk mixture may also be employed. In some cases astringents are indicated.

Opium is amissable in the early part of the disease after the tract has been thoroughly emptied, where there are large fluid movements attended by symptoms of collapse. Stimulants are required in the majority of severe cases. The general condition of the patient is the best guide as to the time for stimulation and the amount required. In cases of extreme prostration, the hot bath, of mustard to the extremities, and sometimes the mustard pack are beneficial.

PRIMARY REPAIR OF PERINEAL LACERATIONS.

By W. C. Dunnaway, M. D., Little Rock.

Gentlemen:—The only excuse I have to offer for the presentation of a paper upon the subject as announced, is that it is a practical one and appeals, because of its importance, to any doctor who does obstetric work. We occupy altogether a different attitude now, as regards pri-

mary repair of damages during obstetric procedures, from what we did a few years back. Aseptic and antiseptic methods have made it possible, and I might say, obligatory upon the physician to undertake the accomplishment of results that formerly were considered hazardous to the patient and humiliating to the accoucheur. Not farther back than is within easy remembrance of many of us, did we often see lacerations of varying degrees of severity, following delivery, left to the beneficent care of nature. I grant that nature, so-called, is generous in her bestowals, but in the light of our present knowledge, here is a field where I think we should not trust too much to her kind offices, but rather should we extend a helping hand in an intelligent and scientific manner.

It is a well-known fact to every physician who knows anything of gynecology, that neglect of the many traumas and lacerations following labor, results often in rendering the unfortunate woman very miserable, and is responsible for her making the rounds to all the pathies, trying all the methods of cure, advertised or not, and finally of her landing upon the surgeon's table for treatment as the court of last appeal. She usually consults anybody but the family physician, telling in very damaging words how she was neglected during her confinement, and how, if she had been properly cared for, she would today be a well woman. Her consultants usually find it tolerably easy to agree with her, too. Just here it will be but fair to state that the unfortunate doctor who attended her probably did not collect the bill which was due him for attending her upon that cold, stormy night and for the attentions he paid her during the ten days or two weeks following. He usually loses the bill, and his reputation, besides the worry and work brought upon him till the case goes out of his hands.

Now, let us see for a moment, what factors contributed to this distressing state of things. The thought of poor remuneration is a weighty one; the unfavorable surroundings and want of proper assistance for doing repair work; the want of a competent nurse and necessary instruments; and last, but not least, a lack of the proper knowledge of how to carry out suc-

cessfully the demands of the situation. These are a few of the conditions that confront us all at times who do obstetric work. The question then to be quickly decided is shall we get busy and overcome all these difficulties at any cost and discharge our whole duty, or shall we pursue the careless methods of the past and trust to luck?

Assuming a case where the above or some such conditions confront us, how may we handle the situation with safety to our patient, credit to ourselves and in keeping with the dignity of the noble profession to which we belong? The patient is delivered of her baby and certain lacerations have followed which ought to be repaired. Boiled water can be obtained and a few clean towels and a sheet or two, and while arranging the necessary aids, the husband or some friend can get some cotton, gauze, ligatures and chloroform and by the time the patient is ready for the anesthetic, the operator is also ready to discharge his duty in a manner becoming his obligations. A fountain bag filled with normal salt solution and a very few simple instruments which have been boiled, will serve for the operating necessary in the average case. As a rule the patient should be anesthetized and placed upon a table, if possible (or the bed will do). The vulva, perineum and nates should be thoroughly scrubbed with soap and hot water, and clots removed from the uterus. If the tears in the cervix are consequential, a strip of gauze should be comfortably packed into the uterus while its cervical edges are being approximated. Besides acting as a sort of guide to the work of repair it prevents a downward flow of blood upon the field of operation in the vagina and perineum. The lacerated and bruised tissues should be trimmed with sharp scissors, all clots removed, and parts coapted by sutures.

The kind of suture material used will depend upon the individual tastes and experience of the operator—my own preference being catgut throughout. The gauze tampon should be gently removed from the uterus and the vagina gently cleansed and cervix surrounded comfortably by a piece of iodoform gauze before the repair of perineum begins, which may be left

permanently or replaced by a fresh one in the judgment of the operator.

The external parts should be thoroughly cleansed and dried, taking care to prevent water entering the vagina, a pad placed on vulva and perineum, and patient placed in bed. It is usually a good plan to catheterize before operating or at least before placing patient to bed. Now, if there are deep cervical tears extending into the broad ligament, or complete tears of the perineum, there should be more care and surgical skill exhibited, better assistance had, and a more elaborate preparation if success shall follow efforts at repair. I feel that it is not out of place, just here, to say that no doctor is prepared to undertake this kind of immediate repair, unless he has studied out the technique thoroughly or has had some surgical experience. This is a difficult operation, and unless the doctor in attendance has acquired knowledge of the necessary details, he should call surgical assistance. It is no more difficult to do an abdominal section than it is to attain desired results in conditions we have just mentioned. A practical knowledge of the anatomy and physiological functions of the parts should be possessed by the operator, as well as some knowledge of the general principles of surgery. Authorities differ as to the kind of sutures and the methods of suture in repair of complete lacerations. I think, however, the method has less to do with the results of the operation than the thoroughness with which the work is done. A majority of the authorities which I have consulted use non-absorbable ligatures, pass them through rectal mucosa and tie them in the rectum; after which the remainder of the operation is completely by the Emmet Hegar methods of plastic work. There is also a difference of opinion as to the advisability of immediate repair or waiting a week or two following confinement. This is another question which I think should be decided largely by circumstances and not by any hard-and-fast rules of action.

My experience in the repair of complete tears is limited to but few cases, but the results impel me to favor immediate repair in most cases and the use of cat-gut throughout. In my

judgment it is better to avoid suturing through the rectal membrane by submucous stitches and tying them so that they are buried when the work is complete.

A discussion of the evil consequences and sequelae of neglected lacerations and repair work, would carry us too far into the boundless field of gynecology for our purpose, therefore this has been very properly left out.

In view of the want of harmony of authoritative opinion I found expressed in our textbooks, I thought it not out of place to ascertain the practice of some of our local physicians and surgeons, mainly for the reason that many of them might be absent from this meeting. Accordingly I have embodied a brief statement from the following well-known gentlemen:

Dr. C. E. Bentley says he uses buried sutures and does not permit any of them to pass through the rectal mucosa.

Drs. Runyan and Shinault place stitches through the submucosa and do not tie any ligatures in the rectum, using a tube in the rectum.

Dr. W. H. Miller, who has had perhaps the largest obstetrical experience in the city, uses catgut through the rectal mucosa.

Dr. Anderson Wakins sutures through the rectal mucosa.

Dr. W. A. Snodgrass uses both rectal sutures and buried ones, as he says all cases cannot be treated alike.

Dr. Oscar Gray never uses any thing but catgut and does not pass ligatures through the rectal musosa.

Dr. W. E. Green says he always uses catgut, sutures all buried, and has uniform success.

Dr. F. L. French uses catgut and does not suture through the rectal mucosa.

If any of these gentlemen are present they will, no doubt, elaborate their views as I may have misunderstood some of them.

The point I wish to make is this, viz: A lack of uniformity upon the part of text-book authorities and the fact that scarcely any of our local operators follow any special technique.

This only emphasizes the truthfulness of my statement in the beginning that the method of doing a thing is not so important as the thoroughness and painstaking care of the operator. In conclusion I wish to say that I recognize that this paper is imperfect in many respects, but the intention in the outset was to introduce the subject which I hope will be freely criticized and elaborated.



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OF THE

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Secretary Arkansas Medical Society

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the State, changes of location, etc., are requested.

REMITTANCES.

Remittances should be made by check, draft, registered letter, money or express. Currency should not be sent, unless registered. Stamps in amounts under one dollar are acceptable.

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Change of address will be made if the old as well as the new address be given.

CONTRIBUTIONS TYPEWRITTEN.

In order to lessen liability of errors, contributions should be typewritten.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

Physicians, Attention! DRUG STORES AND DRUG STORE POSITIONS anywhere desired in the United States, Mexico or Canada. F. V. KNIEST, Omaha, Neb. Easy Terms.

Editorials

AGAMOFILARIA GEORGIANA.

The publication in this number of the JOURNAL of an article by Dr. T. D. Wilson, entitled, "Report of an Interesting Case," brings to mind a paper read by Dr. C. Wardell Stiles before the American Society of Tropical Medicine, at Philadelphia, March 27, 1906 (Bulletin No. 34—Hygienic Laboratory, 1907), in which he describes an apparently new round-worm parasite for man. Specimens of a worm taken from a sore on the ankle of a negress at Darien, Ga., were sent to the Laboratory by Dr. St. Joseph B. Graham, of Savannah, Ga., the medical history of the case being furnished by Dr. P. S. Clark, of Darien, in whose practice the case was observed, and is as follows:

"In August, 1896, I was called to see a negress; age, 57; occupation, washerwoman. I found her suffering with pain and swelling in and around her left ankle and instep. She said she could feel something moving in the swollen places, but there was no abrasion on the skin. I gave her a liniment with which to rub the affected parts. This did not seem to be of much benefit. She continued to suffer for 12 or 18 months, when suddenly she discovered a worm coming out of the most swollen place; and worms continued to appear singly at intervals for a month, when the opening healed and the pain and swelling subsided, her foot became entirely well, and gave no further trouble. She died in 1903 of tuberculosis of the lung. I think there were as many as two or three dozen of these worms extruded from this opening during the above-mentioned period."

The specimens examined were immature, not well preserved and presented difficulty in technique and interpretation, but on account of the recognition of certain anatomical points, Stiles was able to make the zoological classification of *Agamofilaria Georgina*. The specific description is found on page 11, and is as follows:

"*AGAMOFILARIA GEORGIANA*, *new species*.

"1906: A new species of parasite in man, Stiles, 1906, Apr. 21, 839-840, N. York M. J.

(1429), v. 88 (16); 1906, Apr. 21, 1232, J. Am. M. Ass., Chicago, v. 46 (16).

"SPECIFIC DIAGNOSIS.—*Agamofilaria*: Adults unknown.

"Agamic form: Length 32 to 53 mm. Body cylindrical, of more or less uniform diameter the greater part of the length, with a maximum diameter of about 560 to 640 μ ; gradually attenuated toward both extremities, slightly more gradually cephalad than caudad. Mouth terminal, central, circular, small, unarmed, but surrounded by six papillæ. Four of these are prominent, submedian, 23 μ elevations, having in some cases almost the appearance of lips; two smaller papillæ are latero-median. Anus a transverse slit, about 44 to 56 μ in transverse diameter, situated ventrally, 64 to 128 μ from end of tail. Tip of tail provided with a small conical projection 8 to 13 μ long by 4 μ in diameter. Excretory pore 0.432 to 0.520 mm. from anterior end. Cuticle in general without transverse striation, except for a fine transverse striation in the anal region, especially postanal, and a (probably pseudo-) striation in the esophageal region. Median lines visible externally in glycerine specimens merely as lines of demarcation between the muscular fields; on section, median bands are very slender, but are visible, and extend centripetally below the muscles, widening in breadth. Lateral bands rather prominent, and may be traced practically the entire length of the worm; they may attain a breadth of 96 μ , but they decrease in breadth cephalad (to about 15 μ) and caudad; they are divided into a dorsal and a ventral portion, which are not necessarily symmetrical and which are separated by a distinct line of single, subcuticular cells; the cells of the lateral bands are chiefly subcuticular, but near the head they extend centripetally in a single row in each half. Attached to the lateral bands, and hanging into the body cavity each side is a sinuous, longitudinal ridge, resembling the head-glands of strongyles, and provided with a central longitudinal canal which empties at the excretory pore; in the bridge of the esophageal region this glandular structure possesses a large apparently unilateral nucleus (296 to 316 μ 90 to 132 μ), situated latero-ventrally. Esophagus sim-

ple, 2.5 to 2.9 mm. long, 88 to 114 μ in diameter (anteriorly) to 334 μ in diameter (posteriorly); its lumen is triradiate, each ray measuring about 10 μ . Chyle intestine straight, or very nearly so, rather large, at first compressed laterally, then rather quadrangular, with fibers running from the submedian lines toward the body wall; farther caudad it becomes flattened dorso-ventrally, measuring about 300 μ transversely by about 200 μ dorso-ventrally; its cells are columnar, about 9 μ in diameter by 30 to 90 μ high; the cuticle of the lumen is about 6.6 to 8.8 μ thick. Rectum about 200 μ long. Body cavity almost completely occupied by the intestine, lateral, longitudinal glands, and a reticular structure extending centripetally from the muscles toward the intestine; a considerable amount of granular material also present (? some of this possibly representing the primordium of the genital glands).

"HABITAT.—Agamic form taken from superficial sores on the ankle of a negress (*Homo sapiens africanus*), at Darien, Georgia, U. S. A. Life history and source of infection known.

"TYPE MATERIAL.—U. S. P. H. & M. H. S., No. 9726."

Since Stiles published his "Report Upon the Prevalence and Geographic Distribution of Hookworm Disease in the United States," a subject that profoundly stirred southern practitioners, his contributions to helminthology are read with special interest in the South. And the fact of this last contribution being based upon a case reported from a southern state, makes the subject one of geographical as well as scientific interest.

Department of Surgery

The Bier treatment of acute and chronic inflammatory affections has long been a favorite one in Europe, receiving the endorsement of such surgeons as Czerny and Mikulicz, but not within the last few years has it been used to any great extent in America. Dickenson (Cleveland Medical Journal, October, 1907) who has treated 26 cases of infected wounds by this

method with improvement, concludes an article on this method of treatment by giving the following instructions to be observed:

"The Bier method of treatment is carried out by the application of an elastic bandage or a piece of thin soft rubber tubing, and by various glass suction cups. For diseases of the extremities the rubber bandage should be applied as a circular bandage, *i. e.*, each turn passing directly over the preceding one, well above the inflamed area. The surface of the skin should first be protected by a thin layer of cotton or gauze. The thin walled and superficial veins are naturally compressed, rather than the thick walled and deeply seated arteries, thereby causing an interference with the return venous circulation and producing venous hyperemia.

Different degrees of compression will cause different degrees of venous stasis, and in applying the bandage experience and judgment are necessary. Too firm compression will produce a marked venous stasis and if prolonged will cause more harm than good.

The following points are, therefore, to be kept in mind:

1. Compression should be just sufficient to produce a reddish-blue color of the skin.

2. The patient should suffer no pain or discomfort. It should be noted, however, that in marked acute inflammatory affections, a slight pain and discomfort, such as throbbing, is experienced even if the compression is accurately applied. This disappears eventually in 5 to 10 minutes, as the hyperemia tends to quiet pain by numbing the terminal nerve filaments by compression, much in the same manner that Schleich's method causes local anesthesia.

3. The temperature of the treated limb should be the same as the untreated limb.

4. The pulse beat should be just as full and distinct as before.

5. By rubbing the parts active hyperemia should be produced.

6. If the formation of pus is evident, free incisions should be made.

7. Drainage, such as iodoform, gauze, etc., should be removed before treatment is started.

The pouring out of serum through the wound favors drainage and liquifies the pus.

8. When edema appears the treatment should be stopped and not resumed until it all disappears.

9. If edema is present before the treatment has been administered, multiple incisions are necessary.

10. All cases should be carefully watched during treatment, the objective signs of a too tight bandage do not make their appearance immediately. Cases of ischemic paralysis have been reported from this neglect.

If the compression is not accurate some one or all of the following conditions may be present:

1. The parts are markedly cyanotic.
2. The patient suffers a great deal of pain and discomfort.
3. The extremities are cold and the skin may have a mottled appearance.
4. The pulse beat is absent or scarcely perceptible.
5. Edema rapidly makes its appearance.
6. By rubbing the parts active hyperemia cannot be produced.

In regard to the length of time the treatments are to be carried out, no fixed rules can be laid down. This will have to be governed by the experience and judgment of the operator, the severity of the affection, its location and whether the disease is acute or chronic. In general it may be said that in acute cases the duration of each treatment should be short, and in chronic cases for a longer period.

This method of treatment has been successfully used in all cases of pyogenic infections and with varying success in tonsillitis, otitis media, epididymitis, orchitis, lymphangitis, arthritis, neuralgia, neuritis, varicose ulcers, ununited fractures, persistent headaches (by applying the bandage around the neck), and of late in various pelvic inflammations, such as endometritis. The gynecologist may find in this treatment a successful means of handling that obstinate affection, chronic endocervicitis.

The Bier treatment is contra-indicated in any inflammation of the veins, marked arter-

iosclerosis, valvular disease of the heart, diabetes, and in cases in which marked nutritional changes and emaciation are present. Some observers mention erysipelas; however, I have seen one case treated with marked success.

Department of Medicine

THE TREATMENT OF NEPHRITIS.—Tyson (*Therapeutic Gazette*, Nov., 1907.) states that all nephritis, except a few malignant cases of the diffuse form and suppurative nephritis, or surgical kidney, is parenchymatous, *i. e.*, the disease process begins in the living cells of the tubules, ultimately resulting in their destruction with the substitution of connective tissue. In the parenchymatous form the cell changes are more rapid but less complete than in the interstitial variety. Regardless of the type, the immediate cause is an irritant. Treatment is preventive and curative, the former seeking to avert the irritant, the later to subdue the irritant and remove its remote results.

The adoption of measure to prevent infectious diseases such as scarlet fever, diphtheria, measles, typhoid fever, rheumatism, etc., will eliminate these diseases as productive factors. Other preventible irritants are over-eating of proteid foods, drinking of alcohol, ptomains generated in intestinal putrefaction and fermentation, cold and moisture.

For the acute form he advises rest, a milk diet of poor milk, purgatives, diaphoretics and diluent diuretics. For complications such as uremia and convulsions, the judicious increase of the same measure. Morphine for the control of convulsions is not without some danger, the danger being greater in the interstitial variety. The convulsions are controlled by inhalations of chloroform, the action of which is augmented or prolonged by rectal enemas of chloral. Venesection followed by intravenous injection of normal salt solution is recommended, but as there is great danger of overloading the venous system, the latter should be preceded by the former.

Of the chronic type, there are a good many who require nothing but dietetic and hygienic treatment; rest, warm baths, avoidance of overwork, exposure, moderate eating, a minimum

of proteid food, exclusion of alcohol and the free ingestion of water between meals. As there is no drug which will create new renal cells, the object is to save the kidney from irritation. For the anemia, small doses of tincture of the chloride of iron in combination with small doses of the bichloride of mercury, freely diluted. The latter drug is given to check fermentation and the generation of toxic substances in the stomach and intestines. Calomel given weekly or bi-weekly acts on the liver and assists in getting rid of some intestinal irritants. The possible power the iodides have of removing fibroid overgrowth, their known diuretic action and their facility to favor the onward movement of the blood, are given. Theocin, in three to five grain doses, is a more reliable diuretic than diuretin.

The complications of chronic nephritis demanding treatment are uremia, dropsy and cardiac failure. Venesection with hypodermoclysis, purging, sweating and high colonic injections of hot salt solution, are the sheet-anchors. Nitroglycerin, a drug which is so often given, is only of value when there is high arterial tension. Sir Lauder Brunton here uses a combination of potassium bicarbonate gr. xxv, potassium nitrate gr. xv, sodium nitrate gr. 1-2. Digitalis and caffeine are indicated when the arterial tension is low. Edebohl's operation is not without value, and should be done in those cases of parenchymatous nephritis with extensive anasarca which do not yield to other treatment. The relief comes from relief of tension. The organic treatment of nephritis is mentioned as being absurd and repugnant, and has not been used. For the sad complication of albuminuric retinitis a stringent diet is advised and the continuous administration of sodium iodide and mercuric bichloride, the eyes being guarded from strain. An ophthalmoscopic examination should be insisted on every six months. Renal headache should be treated by measures of elimination. Dr. Samuel West highly commends pilocarpine nitrate or muriate in one-twelfth grain dose increased to produce an effect on the skin. Before morphine is used, caffeine, nervous sedatives and counter-irritants should be used.

Department of Dermatology

In concluding a course of lectures upon "Errors in the Diagnosis and Treatment of Diseases of the Skin," delivered at the New York Skin and Cancer Hospital, April, 1907 (Therapeutic Gazette, Oct. 1907), Dr. L. Duncan Bulkley after recapitulating the points discussed, formulated the following, "Dermatologic Don'ts:"

1. Don't be too hasty in a positive diagnosis certainly not from inspecting any single portion of an eruption; many a cutaneous disorder will present very different appearances in different localities.

2. Don't fail to examine each and every part affected, both for diagnostic and therapeutic purposes.

3. Don't forget that a patient may have several entirely distinct diseases of the skin at the same time, one of which may mask the other and confuse the diagnosis.

4. Don't neglect to get and keep a full written history of every case, recording symptoms at each visit, with the effect of remedies, and abbreviated copies of prescriptions given.

5. Don't fail to use a magnifying glass in observing and studying all lesions on the skin, however good the vision may be; it demonstrates details in eruptions which the naked eye overlooks.

6. Don't lose sight of the value of the microscope when there is any suspicion of a vegetable parasitic disease.

7. Don't forget that syphilis is a great imitator of many diseases of various organs, and that in most dermatological statistics it forms about one-tenth of all cases.

8. Don't fail to establish the fact clearly whether syphilis has or has not anything to do with the special case under consideration.

9. Don't exclude syphilis simply because of the absence of a venereal history, if the character of the eruption and sufficient history and other symptoms corroborate it.

10. Don't ignore the fact of the relative frequency of "syphilis in the innocent," and don't fail to search for the present or past point of

entrance of the poison by means of an extra-genital chancre, when other explanation is absent.

11. Don't overlook marital infection or hereditary acquirement of syphilis, although the latter seems to be much less frequent than in years past.

12. Don't forget, in cases which are at all doubtful, to use the analytical method of diagnosis, noting down any and all eruptions which might look like the one under consideration, and then, by a process of exclusion, eliminate one after the other, until the one is found which answers all or most of the requirements.

13. Don't forget, while studying the eruption in order to establish a correct diagnosis, that the patient commonly requires to be studied also, to enable him to understand the proper basis for treatment.

14. Don't forget that to have a healthy skin the body must be healthy, and all its organs must perform their functions in a proper manner.

15. Don't forget that the urine affords an index as to how the metabolic processes are performed; also that while there may be no albumin, casts, or sugar found in it, its chemical constitution may be far from normal and indicate great metabolic errors which should be corrected.

16. Don't forget that diet and hygiene may play a very important part, as contributory causes at least, in many eruptions, and that when they are faulty treatment may be proportionately unsatisfactory.

17. Don't imagine that arsenic is a panacea for diseases of the skin; experience has shown that it has relatively little if any effect on most eruptions, although when combined with other proper treatment it does often aid in restoring vital tone to many portions of the body.

18. Don't simply give iodide of potassium when in doubt, or when a possible syphilitic nature of an eruption is suspected; if the eruption is due to syphilis it should be so diagnosed and efficiently treated with mercury also, even to the end.

19. Don't fail in your duty to syphilitics, both in guarding against the infection of others

and also in securing for them effective treatment, sufficiently prolonged, to guard them against the serious possibilities of neglected syphilis.

20. Don't attempt too much local treatment in any of the lesions of syphilis; if the disease itself is efficiently treated constitutionally, there is very little need of other than the simplest local measures.

21. Don't be too vigorous or active with local treatment in any disease of the skin, unless you are very well acquainted with the remedies employed and feel that you understand the skin of the patient well.

Don't forget that much distress, and often harm, is caused by too stimulating and irritating applications, and that the skin is a delicate organ, when the epidermis has been removed or profoundly altered by accident or disease.

23. Don't suppose that any of the nostrums advertised for commercial advantage can have virtues above the remedies known to the profession, and do not employ them, as is often done, simply as a ready-made article of hoped-for value; whatever is known to be of value should, of course, be used by the profession.

Don't try to have too many remedies or combinations of remedies: it is better to have a few tools which one knows how to handle well, than to have a vast number with which one is poorly acquainted.

25. Don't use nitrate of silver too freely or too frequently on superficial sores: those of simple character can be often thus stimulated into an epithelioma of serious character.

places the responsibility for a large part of the violation of the law where it properly belongs, and not as usual, on the Board of Pharmacy Examiners. The doctor has evidently studied the pharmacy law carefully and understands its provisions.

In Section 5286 the law plainly says, "All suits for violation of * * * * may be instituted in any court having jurisdiction, *by any citizen* * * * *". "It shall be the duty of the prosecuting attorney of the county * * * * to prosecute all persons * * * * when notified *by any citizen of the county*." Thus, it plainly appears, who it is that must proceed against violaters of the law: *any citizen of the county*. No one else!

The legislature of 1903 was urged to give the Pharmacy Board authority to institute such action, but that body refused to accord the authority.

I wish to say however that the situation is rapidly improving. Arkansas druggists are fast awakening to the necessity of doing business legally. Ten years ago there were eighteen counties in the State without a single registered man in them. Now there is not one county which does not contain one or two or more registered druggists. That this is a wonderful improvement, all will admit.

It is believed that a little kind "suggestion" by the physicians in the incorporated towns, to which only the law applies, would greatly hasten the full fruition of this beneficial law. The Arkansas Statutes is unusually liberal. It does not absolutely require that *all* prescription clerks shall be registered. Section 5273 says, " * * * * it shall be unlawful for the proprietor of said store or pharmacy to allow any person other than a registered pharmacist to compound * * * * *except as an aid to or under the supervision of a registered pharmacist*." Section 5283 says, " * * * * provided any person not a registered pharmacist may conduct such a store, if he keeps constantly in the store a registered pharmacist."

So, it appears that there should be at least one registered pharmacist regularly employed in every store where prescriptions are compounded.

Communications

"A PLEA FOR REGISTERED PHARMACISTS."

Little Rock, Ark., Nov. 1, 1907.

To the Editor:

The article in the September issue of the JOURNAL by Dr. S. P. McConnell, under the above caption, is so timely and important that I beg space in the JOURNAL for a few comments.

The pleasure felt in reading the article was intensified by the fact that Dr. McConnell

It may be of interest to the medical profession to know that there are at this time 690 registered druggists in Arkansas, of which number, 230 are employers, and that the demand for the latter is greater than the supply.

JOHN B. BOND, Sr.

District and County Societies

THE FIRST DISTRICT MEDICAL SOCIETY held its Fall meeting at Paragould, October 8, 1907. The following program was rendered: Morning session—President's address, Dr. Thad Cothren, Walcott. Address of the Retiring Councilor, Dr. G. A. Warren, Black Rock; address of the New Councilor, Dr. J. C. Hughes, Walnut Ridge. Papers were read by Dr. H. S. Collier, of Osceola; Dr. W. O. Parrish, of Hector; Dr. L. H. Hill, of Paragould; Dr. J. B. Pringle, of Hoxie; Dr. H. N. Dickson, of Paragould; Dr. C. M. Lutterloh, of Jonesboro; Dr. L. H. Hall, of Pocahontas. From 1:30 to 4 o'clock p. m., a surgical clinic was held by Drs. A. G. and H. N. Dickson and Dr. L. H. Hill. A banquet was held in the dining hall of the Paragould Sanatorium, with Dr. G. A. Warren, toastmaster. "Law and Medical Jurisprudence," was responded to by Hon. R. P. Taylor; "Relation of the Pharmacist to the Doctor," by J. A. Thompson, Ph. D.; "Duties of the Clergy Toward the Medical Profession," by Rev. Dr. Pipkin; "Relation of the Dentist to the Doctor," by H. J. Green, D. D. S. The Elks entertained the members and visitors at a smoker at Elk's Hall.

BOONE COUNTY NEWS ITEMS.—Dr. Swartz Baines has removed from Harrison to Bergman, Ark.—Dr. J. R. Potts recently visited Hot Springs in the interest of his father's health.—Dr. J. H. Fowler has become the President of the Farmers Union Telephone Co. Dr. George Elam, who for several years has been practicing at Bellefonte, has moved to his old home at Eros, where he will continue to wield the scalpel.

THE BRADLEY COUNTY MEDICAL SOCIETY meets the third Monday in each month, at Warren or Hermitage. The membership is more

than double that of last year and is representative of the best that is in the profession. Only a few physicians in the county are non-members, and they take no interest in medical matters. The Society is in good working order, and a number of valuable papers were read and discussed at the last meeting. The next meeting will be held at Warren, on the 18th of November.

THE CLEVELAND COUNTY MEDICAL SOCIETY not having had a meeting since April, will make a strenuous effort to have a quorum at the meeting scheduled for the 18th.

THE CRAIGHEAD COUNTY MEDICAL SOCIETY holds regular monthly meetings which are well attended. The physicians of Jonesboro have organized what is known as a Post-Graduate Class of Physicians and Surgeons. Meetings are held every Friday night. The attendance is good and much good work is being done.

THE DESHA COUNTY MEDICAL SOCIETY has but one meeting a year. The members are so widely scattered, it is impossible to meet more often.

LINCOLN COUNTY NEWS ITEMS.—Dr. J. T. Palmer, of Starr City, is having a nice residence constructed.—Dr. C. C. Price, of Douglass, is a prospective candidate for the Legislature.—Dr. Lowry, of Varner, is contemplating moving to Cominto since the death of Dr. Wood.

THE MISSISSIPPI COUNTY MEDICAL SOCIETY will hold its next monthly session at Blythesville, on the 19th of November. For the first time in many years not a case of malarial hemoglobinuria has been reported by physicians in this county. The question of fees and fee-bills is still being agitated in the society, and some definite pronouncement is expected at the next meeting. The secretary, Dr. Brewer, propounds the following question to the editor: "If a surgeon perform an amputation by himself, not asking for assistance of a brother physician, but secures a layman to give the anesthetic for which a fee of \$5.00 is collected from the patient, would he be violating the Code of Ethics?" The society will be well represented

at the Tri-State Medical Society which meets at Memphis, on November 19th.

THE MONROE COUNTY MEDICAL SOCIETY, after an adjournment of three months, held a most successful and highly interesting meeting at Clarendon, on October 1st.

THE POPE COUNTY MEDICAL SOCIETY will hold its next regular quarterly meeting December 19th, and as there was no meeting held in September on account of an insufficient number of members to constitute a quorum, it is earnestly requested of all members of the society to be present at the next meeting.

Change of Addresses

Dr. C. B. Linzy, from Ola, to Plainview.

Dr. D. D. Wells, from Acapulco, Mexico, to Dallas, Tex., 860 Ross Ave.

Dr. G. W. Fletcher, from Tillar, to Blythesville, Ark.

Dr. W. D. Hankins, from Salado, to Hot Springs, Ark.

Dr. Schwartz Baines, from Harrison, to Bergman, Ark.

Dr. George F. Elam, from Bellefonte, to Eros, Ark.

News Items

Dr. J. T. Henry, of Eagle Mills, Councilor of the Fifth District, attended the Fall Reunion of the Scottish Rite Consistory, at Little Rock, November 12-14th.

Dr. A. L. Carchimael, physician to the Blind and Deaf Mute Institutions, Little Rock, is recovering from an attack of enteric fever.

Dr. O. W. Clark, of Pine Bluff, was in Little Rock on the 13th, and took a trip over the hot sands that lead to the oasis in Khorassan's Desert.

Dr. W. J. Pinson, cashier of the American Banking and Trust Company, of El Dorado, participated in the exercises attendant upon the Fall Reunion of Albert Pike Consistory, at Little Rock.

Dr. L. L. Purifoy, local surgeon for the St. Louis, I. M. & S. R. R., at El Dorado, will spend the winter in Chicago, at Rush Medical College.

Dr. C. F. Merriwether, Dr. Bathurst and Dr. Illing, are ensconced in the new office building of the Southern Trust Company.

Dr. J. J. Morrow, Secretary of the Baxter County Medical Society, was recently elected Secretary of the Royal Arch Chapter, at Cotter.

Dr. I. M. George, after an absence of several years from El Dorado, where he formerly practiced, has returned and will limit his practice to diseases of the eye, ear, nose and throat.

Dr. E. L. Biggs, of Hot Springs, was a recent visitor in Little Rock.

Births

Born to Dr. and Mrs. C. W. Chaffin, of Moro, on October 31st, a ten-pound girl.

Marriages

Dr. Mahlon D. Ogden, secretary of the Pularski County Medical Society and one of the most promising physicians in Arkansas, was married to Miss Sue Worthen, of this city, at Christ's Church, on Thursday, November 14th. His many medical friends throughout the State wish him unbounded social, commercial and professional success.

Deaths

B. G. Wood, M. D., Memphis Hospital Medical College, 1889, a member of the Drew County Medical Society and the Arkansas Medical Society, died at his home in Cominto, Drew County, Oct. 11, 1907, from intestinal catarrh. Dr. Wood was born in Columbia County in 1867, and educated in the public schools. He attended the New Orleans Polyclinic in 1899. He practiced ten years in Louisiana and moved to Arkansas, where he did an active practice until ten days before his death. He was a man of high ideals and possessed all the elements that go to make a true man. Every man, woman and child that knew him was his friend. Professionally he ranked amongst the best, and died a slave to his profession. He was an active worker of his county society.

A. S. J. C.

Monthly and Weekly Programme

Monthly and weekly program for the first six months of a four years' postgraduate course of study arranged for the use of county medical societies by John H. Blackburn, M.D., Bowling Green, Kentucky.

SUGGESTIONS FOR THE USE OF THE POST-GRADUATE COURSE OF STUDY.

1. A skeleton program for each month will be found below, followed by an "Elaborated Weekly Program" for each weekly meeting in the month. It is expected that the Secretary or Program Committee of each County Society will use this skeleton program in assigning work to the leaders or teachers. Each teacher will then find his subject outline in the elaborated weekly program.

2. *Essentials to a Successful Meeting*: Meet promptly. Arrange that only those who are prepared shall lead in any subject. Allow 45 minutes to teacher, if only one; 25 minutes each, if two; 15 minutes each, if three. Allow five minutes to each member to discuss the subject or to ask questions.

3. *Anatomy*: Discuss those structures that will undergo morbid changes as a result of the particular disease under consideration, exhibiting gross and microscopic specimens when possible. Demonstrate fresh specimens from the lower animals, if those from the human are not obtainable.

4. *Physiology*: Study the functions of those organs which undergo changes.

5. *Pathology*: Study the pathologic anatomy and physiology, and their relations to the symptoms presented.

6. *Bacteriology*: Study the morphology and biology of bacteria, and the methods of recognizing and differentiating them.

7. Present clinical cases of brief reports, bearing on the subject, whenever possible.

8. *Treatment*: Study materia medica, pharmacology and therapeutics, exhibiting crude drugs and their U. S. P. and N. F. preparations. Encourage members or classes to carry out experiments on animals in regard to the

effects of drugs. Emphasize the work of the Council on Pharmacy and Chemistry. Prescription writing with blackboard demonstrations, should be made a prominent feature whenever practicable.

9. *Reporter*: It is insisted that there should be a reporter for every society, whose duty it shall be to present a digest or review of the recent literature of the subject of study for that month.

10. Adjourn promptly one and a half hours after the time for the meeting to be called to order.

SECOND MONTH.

SURGERY OF THE BRAIN.

First Weekly Meeting.

Anatomy of the Cranium.....
Anatomy of the Brain.....

Second Weekly Meeting.

Physiology of the Brain.....
Cerebral Localization.....
Fractures of Vault of Cranium.....

Third Weekly Meeting

Fractures of Base of Cranium.....
Different Diagnosis of Concussion and
Compression of Brain.....

Fourth Weekly Meeting.

Gunshot Injuries of Head.....
Intracranial Hemorrhage
Traumatic Meningitis. Etiology, Symptoms.
.....

Fifth Weekly Meeting.

Abscess of Brain: Pathology, Symptoms,
Treatment
Tumors of Brain: Varieties, Pathology,
Symptoms

Monthly Meeting.

Diagnosis of Tumors of Brain.....
Technic of Brain Surgery.....
Diagnosis of Fractures of Base.....

FIRST WEEKLY MEETING.

Anatomy of Skull: Demonstrate specimen.

Vertex of Skull: External surface—boundaries, bones included, sutures, glabella, bregma, inion.

Internal surface—shape, surface markings.

Base of Skull: Internal surface, fossæ.

Anterior Fossa: Shape, boundaries, bones, portion of brain, foramen, cæcumel, factory groove, ethmoidal foramina.

Middle Fossa: Boundaries, bones, portion of brain, optic foramen, sella turcica, cavernous groove, sphenoidal fissure, foramen ovale, foramen spinosum, foramen lacerum medium, anterior surface of petrous portion of temporal.

Posterior Fossa: Shape, boundaries, bones, portion of brain, foramen magnum, jugular foramen, internal auditory meatus, inferior occipital fosse.

External Surface: Boundaries, occipital, temporal, sphenoid and ethmoid bones, articular surfaces, orifices of foramina mentioned above, stylo-mastoid foramen. Roof and apex of orbit.

Laternal Region: Boundaries, sutures ste-

Temporal Fossa: Boundaries, sutures, stephanion, pterion.

Mastoid Portion: Bones, mastoid process, auditory meatus.

Zygomatic Fossa. Spheno-maxillary Fossa.

ANATOMY OF BRAIN.

Membranes of Brain: (1) Dura Mater—structure, attachments. (2) Arachnoid—structure, subarachnoid space. (3) Pia Mater—structure.

Portions of Brain: Medulla, pons Varolii, cerebellum, mid-brain, cerebrum.

Ventricles: Lateral, third, fourth, foramen of Majendie, aqueduce of Sylvius, communications, contents.

Distribution of Gray Matter: (1) In the bulb, (2) in the pons, (3) in the midbrain, (4) in the cerebrum, (5) in the cerebellum.

Structure of Bulb: Shape, size, surfaces, white matter, gray matter, pyramids, olives, restiform bodies, funiculi, corpora quadrigemina.

Structure of Pons: Distribution of white and gray matter.

Structure of Midbrain: White and gray matter, aqueduct, fillet. Crus cerebri.

Origin of cranial nerves.

Cerebellum: Vermis, hemispheres, peduncles, white and gray matter.

Cerebrum: Hemispheres, corpus callosum, cortex, lobes, basal ganglia, corpus striatum, optic thalamus, internal capsula, corona radiata projection fibers, association fibers, commissural fibers.

SECOND WEEKLY MEETING.

PHYSIOLOGY OF THE BRAIN.

Motor Functions: Motor area, methods of localization, trace fiber from cortex to arm.

Sense Areas: Muscle sense, pressure and temperature sense, pain sense.

Center of Vision: Location, lower centers.

Auditory Center: Location, two roots of cranial nerve.

Centers of Smell and Taste.

Speech Centers: Motor and sensory aphasia.

Functions of Cerebellum: Coordination, psychical functions, location of function.

Functions of Medulla: Respiratory and circulatory centers.

CEREBRAL LOCALIZATION.

Sensori-motor Area: Fissure of Rolando, anterior and posterior central gyri, paracentral lobule, operculum, third frontal gyrus. Leg, arm and head regions. Hemiplegia, monospasm, Jacksonian epilepsy. Muscular sense, parietal lobes.

Speech Areas: Sylvian fissure, third frontal convolution, motor aphasia. First and second temporal convolutions, sensory aphasia. Visual-speech area, lower parietal.

Right and Left-handed Persons.

Sight Area: Occipital lobes, hemianopsia.

Sound Area: First and second temporal convolutions.

Psychic Centers: Frontal lobes.

"Silent Areas."

Cerebral Topography: Fissure of Rolando, fissure of Sylvius. Horsley's method, Kronlein's method, Chiene's method.

FRACTURES OF VAULT OF CRANIUM.

Varieties: Fissured, fragmented, comminuted, perforated, simple and compound. Fracture of inner or outer table alone. Depression, central and peripheral.

Mechanical principles involved "bending" and "bursting" fractures. Lines of fracture.

Prognosis: Depends on brain injury and infection. Extent of injury, area of brain involved, degree of depression, simple or compound fracture. Remote effects, headache, epilepsy and insanity.

Treatment: (1) Fracture without depression and without cerebral symptoms, (2) with depression, (3) with cerebral symptoms, (4) compound fractures.

THIRD WEEKLY MEETING.

FRACTURE OF BASE OF CRANIUM.

Pathology: Usual points of impact, beginning points of fracture, line of fracture, transverse, longitudinal, diagonal, circular. Effects of bilateral and unilateral compression. "Counter-stroke."

Diagnosis: (1) History of character of blow or injury, site of impact, etc. (2) Ecchymoses—In eyelids, about eyes, mucous membrane of pharynx, mastoid region, post-cervical region. Time of appearance. Differentiate from local injuries. (3) Flow of brain tissue, blood and serous fluid—In external auditory canal. From nose. From pharynx. Significance of each. Differentiate in case of hemorrhage. (4) Disturbance in function of cranial nerves. Forms of injury. Sites of injury.

Treatment: Disinfection of aural and nasal cavities. Drainage. Removal of fragments. Rest.

Differential Diagnosis of "Concussion" and Compression of Brain: (1) Onset of symptoms, (2) special senses, (3) respiration, (4) pulse, (5) nausea and vomiting, (6) bowels,

(7) bladder, (8) deglutition, (9) voluntary muscles, (10) pupils, (11) prognosis.

FOURTH WEEKLY MEETING.

GUNSHOT INJURIES OF HEAD.

Character of wound, wound of entrance, wound of exit, effect on inner and outer tables, effect on meninges, effect on brain substance, hydraulic and hydrodynamic pressure. Differences of effects of leaden and jacketed missiles. Effect of initial velocity and range.

Symptoms: Areas of brain involved.

Medicolegal interest in pistol-shot wounds.

Treatment: Disinfection. Indications for trephining. Use of x-ray.

INTRACRANIAL HEMORRHAGE.

Extradural Hemorrhage: Middle meningeal artery and branches. Character of wounds, by "contrecoup." Effects of hemorrhage, local and general.

Symptoms: Mental disturbances, "free interval," pulse, respiration, motor disturbances, sensory disturbances, pupils.

Treatment: In compound fracture, indications and technic. In internal hemorrhage, indications for trephining. Kronlein's "sites of election," method of localization.

Subdural Hemorrhage: Pial vessels, branches. Character of injuries. Extent of hematoma, quantity, absorption. Differentiate from supradural—(1) free interval, (2) pulse, (3) motor disturbances, (4) localizing symptoms.

TRAUMATIC MENINGITIS.

Etiology: Injury, micro-organisms present, mode of entrance.

Pathology: Leptomeningitis, character of exudate, extent, cortex. Pachymeningitis, changes in dura, exudate, origin.

Symptoms: Early and late. Cortical or basilar. Chills and fever, headache, pulse, nausea and vomiting, pupils, delirium, stupor, coma.

FIFTH WEEKLY MEETING.

ABSCESS OF BRAIN.

Acute Traumatic Abscess.—Pathology: Compound fracture, injury to meninges and cor-

tex, character and quantity of pus, changes in meninges and cortex, granulation and cicatrization.

Symptoms: Local evidences of sepsis, pulse and temperature, focal symptoms. Differentiate from meningitis.

Treatment: Indications for operative treatment.

Chronic Traumatic Abscess.—Pathology: Secondary to pus in skull, foreign bodies, ear, nose, throat. By metastasis. Sinus-thrombosis. Location of abscess, abscess membrane, mode of extension, rate of growth.

Symptoms: (1) Primary symptoms, cause and significance. (2) Latent period, length, usual symptoms. (3) Secondary symptoms. (4) Terminal period.

Treatment: Indications for exploring or trephining.

TUMORS OF BRAIN.

Varieties and Pathology.—Glioma and Sarcoma: Age, primary and secondary, diffused, number, rate of growth, from white or gray matter, points of difference.

Garcinoma: Age, primary, by extension, by metastasis, number, location.

Cysts: With malignant tumors, from clot, parasites, depressed fracture.

Tubercle: Age, history, secondary or primary, number, location.

Gumma: Previous history, number, location.

Symptoms.—General: Headache, optic neuritis, vomiting, giddiness, mental disturbance.

Localizing: (a) Central motor area, signal symptom, extension, paralysis or anesthesia. (b) Prefrontal region, mental symptoms, later symptoms. (c) Parieto-occipital lobe, aphasia. (d) Occipital lobe. (e) Temporal lobe. (f) Basal ganglia. (g) Pons and medulla.

THIRD MONTH.

RHEUMATISM AND GOUT.

First Weekly Meeting.

Anatomy of Synovial Membranes and Periarticular Structures

Anatomy of Endocardium

Etiology of Acute Articular Rheumatism..

Second Weekly Meeting.

Acute Rheumatism: Pathology, Clinical History

Acute Rheumatism: Complications, Treatment

Third Weekly Meeting.

Acute Rheumatism in Children.....

Muscular Rheumatism: Clinical Varieties and Treatment

Chronic Articular Rheumatism: Pathology, Symptoms and Treatment.....

Fourth Weekly Meeting.

Gout: Theories of Causation, Clinical Varieties

Rheumatoid Arthritis: Etiology, Symptoms, Diagnosis

Monthly Meeting.

Bacteriology of Acute Articular Rheumatism.

Dietetics in Rheumatism and Gout.....

Therapeutic Action of the Salicylates.....

Resolutions

Adopted by the Executive Committee of the American National Red Cross, October 18, 1907.

WHEREAS, By international agreement in the Treaty of Geneva, 1864, and the revised Treaty of Geneva, 1906, "the emblem of the Red Cross on a white ground and the words Red Cross or Geneva Cross" were adopted to designate the personnel protected by this Convention; and,

WHEREAS, The Treaty further provides (Article 23) that "the emblem of the Red Cross on a white ground and the words Red Cross or Geneva Cross can only be used whether in time of peace or war, to protect or designate sanitary formations and establishments, the personnel and material protected by this Convention;" and,

WHEREAS, The American National Red Cross courts under the regulations of this Treaty according to Article 10, "Volunteer aid societies, duly recognized and authorized by their respective Governments," such recognition and authority having been conferred upon the American National Red Cross in the Charter granted by Congress, January 5, 1905, Section 2, "The corporation hereby created is designated as the organization which is authorized to act in matters of relief under said Treaty;" and, furthermore,

WHEREAS, In the Revised Treaty of Geneva 1906, in Article 27, it is provided that "the signatory powers whose legislation should not now be adequate, engage to take or recommend to their legislatures such measures as may be necessary to prevent the use by private persons or by societies other than those upon which this convention confers the right thereto of the emblem or name of the Red Cross or Geneva Cross."

BE IT RESOLVED, That the Executive Committee of the American National Red Cross requests that all hospitals, health departments and like institutions kindly desist from the use of the Red Cross created for the special purpose mentioned above, and suggests that for it should be substituted some other insignia, such as a green St. Andrew's Cross on a white ground, to be named the "Hospital Cross," and used to designate all hospitals (save such as are under the Medical Departments of the Army and Navy and the authorized volunteer aid society of the Government), all health departments and like institutions; and, further,

BE IT RESOLVED, That the Executive Committee of the American National Red Cross likewise requests that all individuals or business firms and corporations who employ the Geneva Red Cross for business purposes, kindly desist from such use, gradually withdrawing its employment and substituting some other distinguishing mark.

Books Received

A MANUAL OF THE PRACTICE OF MEDICINE. By A. A. Stevens, A.M., M.D., Professor of Therapeutics and Clinical Medicine in the Woman's Medical College of Pennsylvania. Eighth Edition, Revised. 12mo of 558 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Flexible Leather, \$2.50 net.

A TEXT-BOOK OF PHYSIOLOGY: for Medical Students and Physicians. By William H. Howell, Ph.D., M.D., LL.D., Professor of Physiology, Johns Hopkins University, Baltimore. Second Edition, Thoroughly Revised. Octavo volume of 939 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$4.00 net; Half Morocco, \$5.50 net.

DISEASES OF THE GENITO-URINARY ORGANS AND THE KIDNEY. By Robert H. Greene, M.D., Professor of Genito-Urinary Surgery at the Fordham University, New York; and Harlow Brooks, M.D., Assistant Professor of Pathology, University and Bellevue Hospital Medical School. Octavo of 536 pages, profusely illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$5.00 net; Half Morocco, \$6.50 net.

A TEXT-BOOK OF CLINICAL ANATOMY: FOR Students and Practitioners, by Daniel N. Eisen-drath, A.B., M.D., Clinical Professor of Anatomy in the Medical Department of the University of Illinois (College of Physicians and Surgeons) Chicago. Second Revised Edition. Octavo of 535 pages, with 153 illustrations, a number in colors. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$5.00 net; Half Morocco, \$6.50 net.

A TREATISE ON DISEASES OF THE SKIN. For the use of advanced Students and Practitioners. By Henry W. Stelwagon, M.D., Ph.D., Professor of Dermatology, Jefferson Medical College, Philadelphia. Fifth Edition, Revised. Handsome octavo of 1150 pages, with 267 text-illustrations, and 34 full-page colored and half-tone plates. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$6.00 net; Half Morocco, \$7.50 net.

THE OPERATING ROOM AND THE PATIENT. By Russell S. Fowler, M. D., Professor of Surgery, Brooklyn Postgraduate Medical School. Brooklyn, New York. Second Edition Enlarged. Octavo volume of 284 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$2.00 net.

THE PANCREAS: ITS SURGERY AND PATHOLOGY. By A. W. Mayo Robson, D. Sc. (Leeds), F. R. C. S. (Eng.) of London, and P. J. Cambridge, M. D. (Eng.) D. P. H. (Camb.) of London. Octavo volume of 546 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$5.00 net; Half Morocco, \$6.50 net.

A TEXT-BOOK OF THE PRACTICE OF MEDICINE. By James M. Anders, M.D., Ph.D., LL.D., Professor of the Theory and Practice of Medicine and of Clinical Medicine, Medico-Chirurgical College, Philadelphia. Eighth Revised Edition. Octavo of 1317 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$5.50 net; Half Morocco, \$7.00 net.

Book Reviews

HUMAN ANATOMY, Including Structure and Development and Practical Considerations. By Thomas Dwight, M.D., LL.D., Parkman Professor of Anatomy in the University of Michigan; Carl A. Hamann, M.D., Professor of Anatomy in Western Reserve University; George A. Piersol, M.D., Sc.D., Professor of Anatomy in the University of Pennsylvania; J. William White, M.D., Ph.D., LL.D., John Rhea Barton Professor of Surgery in the University of Pennsylvania. With 1734 Illustrations, of which 1522 are original, and largely from dissections by John C. Heisler, M.D., Professor of Anatomy in the Medico-Chirurgical College. Edited by George A. Piersol. Cloth, \$7.00. J. B. Lippincott Company, Philadelphia and London.

This work is made up of ten chapters embracing the following subjects:

The Elementary Tissues, The Skeleton, including the joints, The Muscular System, The Vas-

cular System, The Special Sense Organs, The Nervous System, The Gastro-Pulmonary System and the Uro-Genital System.

Essential anatomical facts are presented in a clear and comprehensive manner and abundant illustrations are introduced to elucidate every subject permitted by the text. In fact, it seems that every part of the body is shown by a beautiful and true-to-nature illustration, all of which are original and can not fail to impress the mind and assist the memory of the student.

The description of the skeleton, the gastro-pulmonary system and the accessory organs of nutrition, were written by Dr. Thomas Dwight; the cerebro-spinal and sympathetic nerves, by Dr. Carl A. Hamann; Dr. J. Playfair McMurich has supplied the description of the muscular and of the blood and lymph-vascular system. The other departments were written by Dr. Piersol, under whose able editorship the work appears.

A most valuable feature of the book is the practical application of anatomical facts and relations to the conditions resulting from disease or injury, Dr. J. William White making this contribution under the title, Practical Consideration.

Composite authorship is a necessity in a work of this character and the harmonious welding of the contributions of the distinguished authors, is deserving the highest commendation. Besides possessing all the features of the latest and best book-making, it is distinctively American, and as such is a notable contribution to American Medicine.

It seems almost invidious to raise an objection to such an excellent treatise, but it is apparent that the paper is too thin and the dimensions of the book too great to sustain the wear and tear to which it will be subjected by the medical student. As the subject matter can not be abridged, these objections can only be obviated in future editions by the use of heavy paper and making two volumes instead of one.

GYNECOLOGY AND ABDOMINAL SURGERY. In two large octavos. Edited by Howard A. Kelly, M. D., Professor of Gynecologic Surgery at St. Johns Hopkins University; and Charles P.

Noble, M. D., Clinical Professor of Gynecology at the Woman's Medical College, Philadelphia. Large octavo volume of 851 pages with 405 original illustrations by Mr. Hermann Becker and Mr. Max Brodel. Philadelphia and London: W. B. Saunders Company, 1907. Per volume: Cloth, \$8.00 net; Half Morocco, \$9.50 net.

The first volume of Gynecology and Abdominal Surgery, issued under the combined editorship of Drs. Hoawrd A. Kelly and Charles P. Noble, has just appeared, and is without doubt one of the most valuable and attractive works in the English language. It is attractive because the paper is heavy, the type large, clear and readable, and the illustrations in elucidation of the text, works of the very best American art, Mr. Hermann Becker having devoted more than four years to their preparation. It is valuable and interesting because amongst its contributors are found the names of America's most distinguished teachers and operators, thus giving it the stamp of recognized modern authority.

In the preparation of the work, the editors have kept in mind the unity of gynecology and abdominal surgery, and as this intimacy is natural, both fields have been embraced. Medical gynecology, a subject of great interest to the general practitioner, is fully treated of by Drs. Noble and Anspach, over one hundred pages being devoted to this subject. There are two chapters that give the book a distinctive value, one on Bactriology, by Dr. William W. Ford, the other on Pathology, by Dr. Elizabeth Hurdon. A perusal of these, clearly indicates the scientific basis of gynecology. Dr. Noble has contributed the chapters on Plastic Operations on the Perineum, Vagina and Cervix, Curetage of the Uterus, and Inversion of the Uterus; Dr.

Kelly, those on Gynecologic Technic and Vesical Fistulae; Dr. John G. Clark, Radical Abdominal Hysterectomy for Cancer of the Uterus; Removal of the Uterine Appendages, by Dr. Clarence Webster. Drs. Alexander J. C. Skeene and Wm. R. Pryor, who contributed respectively the chapters on Ovariectomy and Vaginal Hysterectomy, died during the preparation of this volume.

The book is deserving of the highest commendation as it is one of the clearest expositions of the subject in the English language. The second volume is to appear soon.

A TREATISE ON FRACTURES AND DISLOCATIONS. By Lewis A. Stimson, B. A., M.D., Professor of Surgery in Cornell University Medical College, New York. New (5th) edition, thoroughly revised. Octavo, 847 pages, with 352 engravings and 52 plates. Cloth, \$5.00 net; leather, \$6.00 net; half Morocco, \$6.50 net. Lea Brothers & Co., Philadelphia and New York, 1907.

A book may be popular without possessing much merit, but merit and genuine worth always bring popularity.

The fifth edition of Stimson on Fractures and Dislocations proves the truth of the latter assertion. This thoroughly revised work, contains all of the latest information concerning the recognition and treatment of fractures and dislocations, and this information has been greatly enhanced through the agency of the X-Ray. There are some twelve new skiagrams and thirty new cuts, and important additions have been made to the sections covering fractures of the carpal and scaphiod bones, of the upper end of the radius and the tarsal bones, etc. No library is complete without this work.

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Next Annual Session, Chicago, Ill., June, 1908.

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Next Annual Meeting, Little Rock, May 13-15, 1908.

President—C. C. Stephenson, Little Rock.
First Vice-President—M. Fink, Helena.
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E. K. Williams, Arkadelphia, one year.
 Adam Guthrie, Prescott, two years.

First Alternates.

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Second Alternates.

H. A. Longino, Magnolia, one year.
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Fourth Councilor District—Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln counties. Councilor: B. D. Luck, Pine Bluff. Term of office expires 1908.

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Original Articles

A RARE MANIFESTATION OF MALARIA.*

Report of a Case.

By George S. Brown, M. D., Conway.

The following case is reported as being of interest, more especially from a clinical viewpoint:

Thomas B., white, male, nine years old, was taken Oct. 8, 1906, with a malarial chill. Dr. R. A. Jones, of Houston, Ark., was called. Had another paroxysm on the 9th. Calomel and quinine were given. At the end of two days the patient's stomach rebelled against the quinine, vomiting every dose he took. It was discontinued. Vomiting was frequent and persistent, bile was vomited, and everything put in his stomach was rejected as soon as he swallowed it. Did not have another chill. Fever of remitting type continued, never going above 103, skin was somewhat jaundiced. Oct. 13th had a cool spell—not a chill—with rise of temperature. With this paroxysm a rigid and tonic contracture of the muscles of the upper and lower extremities came on, lasting about four hours, and then passed off. Was rational all the time.

I was called to see him by Dr. Jones, on October 14th. I found him with temperature 102, pulse 125, weak and irregular; headache; was rational. Muscles of extremities were markedly rigid and contracted. A notable feature was the flexor muscles of arms were rigid and in tonic contracture, while the extensor muscles of the legs were the ones most affected. The rigidity and contracture extended to the fingers and toes, so that neither could be flexed nor extended. The rigidity came on with the exacerbation and passed off as it declined.

The rigidity of the muscles in this paroxysm lasted about four or five hours and passed off as before and did not return. The head was not retracted and no rigidity of the muscles of the

neck or back was present. There was some difficulty in articulating and swallowing. Pupils contracted and equal, reacted well to accommodation but not to light. The eyes were injected. Patella reflexes exaggerated. Legs could be flexed at knee, with some difficulty. Kernig's sign was marked. Spleen enlarged and tender. Could not sleep.

Gave bromide of potash and choloral hydrate by the bowels. Ten gr. doses of hydrochlorate quinine were given hypodermatically every two hours until three doses were given, then every four hours. He slept about three hours during the night. Tinct. digitalis and tinct. strophanthus, with whiskey was advised by the mouth. Normal salt solution was given every four hours by the bowels.

I saw him again at 8:30 on the morning of the 15th; he was in a stupor and could be aroused with difficulty. Pulse was now 150, weak, thready and irregular, temperature 100 1-2, eyes more injected and signs of brain congestion more marked. The muscles of the extremities and entire body were now relaxed and flabby and remained so until his death, which occurred about 12 o'clock.

This, I believe, was a case of malarial infection with marked congestion of the meninges of the brain and spinal cord. In whatever form manifested there is one symptom which may be regarded as pathognomonic, is constantly present and characterizes all forms of malarial infection: the periodicity of the occurrence of the symptom or symptoms complained of. In other words, the recurrence at a certain time of day, or in a certain number of hours or days, of the self-same symptoms.

In the foregoing case the diagnosis was based upon clinical observation only, and being twenty miles from home I had no opportunity to examine the blood. I am of the opinion that if large doses of quinine hypodermatically, deep in the muscles had been given early, this boy might have been saved. It is a mistake to stop quinine when it is rejected by the stomach. It should be given hypodermatically, or by the bowels.

*Read in the Section on Practice of Medicine, of the Arkansas Medical Society, at the Thirty-First Annual Session, Little Rock, May, 1907.

Dr. J. J. France, of Portsmouth, Va., in the N. Y. Medical Journal, February 9th, 1907, reports a case, very much like this one. The diagnosis was confirmed by a microscopical examination of the blood. The tertian parasite in abundance was found. The patient was put upon quinine, the paroxysms ceased, and treatment discontinued in ten days.

Thompson, Butler, Ross, Pepper, Loomis and others speak of rigid and contracted muscles in some rare cases of pernicious malarial fever.

DISCUSSION.

Dr. Mayd: I appreciated the paper very much, but know of nothing to say about it that would be interesting, because I see so few malarial infections that I don't know how to differentiate between malarial infections, and any other infection that would produce the same kind of symptoms. Sometimes I have thought that a malarial infection was not mixed with any other infection. I am impressed with that particularly in reference to typhoid fever; I don't believe the two infections develop at the same time. I think malaria is antagonistic to typhoid fever. I don't know whether I am alone in that opinion or not, but I have reasons for it in the experience I have had with typhoid fever. Whether malaria is antagonistic to other infections or not, I do not know.

Dr. Archer: When we get to thinking that we know malaria pretty well, just about that time we get a case that convinces us that we do not know very much about it. I find it playing antics of this kind quite often. As far as a mixed infection, or an infection of malaria with other diseases is concerned, I am sure it does exist. I think upon the administration of the anti-malarial treatment, it makes quite a difference on the course of the disease. I find in patients who are suffering with typhoid fever or pneumonia and have malarial complications, that the administration of quinine and other anti-malarial treatment is very beneficial and marked results follow.

I think the paper is a good one, and I think the doctor is right. No doubt the early injection of some form of quinine into the muscles would have given him good results.

Dr. Lindsey: I have had some experience in these malarial troubles, and my treatment has been probably no more successful than Dr. Brown's. Yet, if there is any good in large doses of calomel at any time, it is in those cases. I never limit the amount given. I give it in 10 and 20 gr. doses, and repeat it until it acts. If these patients are unconscious and can not take the quinine by the mouth, I give them the bi-sulphate hypodermically. A great many of them will recover under this treatment that will not unless the quinine is

pushed. That was the point I wanted to make; large doses of quinine hypodermically and by the rectum.

Dr. Walt: I have had a good deal of experience with malaria. I want to bring out a point possibly that has not been thought of enough, and that is that in all malarial troubles, especially where they continue for some time, we must bear in mind that there is an interference with metabolism, and where you have an interference with the cells of the body we have an increased amount of waste, and there is nothing that demonstrates that more than in malaria. When you have malaria in a slight degree, with Nature taking care of the waste as well as the invading plasmodium, quinine will correct it and do it alone. But if it is marked, there are considerable metabolic changes carried on, and the waste from the cells fills up the blood stream, and this must be gotten rid of, because the toxins are evidently factors to be considered, and we do that by elimination. As far as calomel is concerned, I would rather rely upon it as the purgative or eliminator. Elimination is necessary to be taken into consideration all the time in those cases of chronic and even sub-acute cases. The acute cases are not so troublesome, but it is necessary even in those. I simply want to call attention to the fact that we must recognize the waste in the body. We must recognize the nervous forces also,—the forces that give magnetic influence to the cell. Those things have to be considered as well as the plasmodium in the circulation. We must not lose sight of those if we expect to cure these desperate cases of malaria.

Dr. Brown: I have but little to add, only to say that I saw this boy at 10 o'clock at night, and he died the next day at 12:00. I commenced giving quinine freely. He had calomel previous to this, and I think, as I said before, he might have been saved if quinine had been given freely enough.

I recognize what Dr. Walt said. I think he is eminently correct, and I thank him very much for the discussion.

This case was to me at first puzzling, and I was a little uncertain about it. I never saw this complication before, although I have perhaps treated 10,000 or 12,000 cases of malaria in a practice of thirty years. I talked with a number of other physicians who have had a larger experience than I have had, and they had not observed these complications before, but in looking up the literature on the subject I found quite a number of authorities refer to it.

My friend Dr. Greeson had a case not exactly like this but something similar. I think he was in doubt as to what the diagnosis was, but it approached this rigid condition of the muscles. It was in his hands and perhaps arm and some parts of the body. Whether that was malaria or not, I don't know. The doctor did not say.

DIRECT BRONCHOSCOPY AND ESOPHAGOSCOPY.*

By R. H. T. Mann, M. D., Texarkana.

The bronchi and esophagus have been practically closed organs as far as examination and treatment were concerned until within the last few years. Foreign bodies in these organs very frequently resulted fatally, due to the inability of physicians to successfully remove them. Many diseased conditions going on in these organs were never successfully diagnosed except at autopsy. Indeed, the removal of foreign bodies from the air passages, and by this I refer to the larynx, trachea and bronchi, has been so unsatisfactory, that of 1,674 cases compiled by Bosworth, there was a mortality of 28.6 per cent. without operations, and a mortality of 25 per cent. following operations. While these statistics may not be exactly correct, yet they show the failures after the operations and also the recoveries without operation, making a difference of only 3 per cent. in favor of operations.

When we leave out of consideration the cases in which foreign bodies occurred in the larynx where they could be seen and removed and take only those cases where the foreign bodies lodged in the bronchi, we have a much higher mortality than 25 per cent. Our only means of removing these bodies was to do a tracheotomy and hope that the patient might cough the foreign body out through the tracheal wound. This only too often proved a failure as might have been expected. For many years various laryngologists have been working to perfect some method by which the bronchi and esophagus might be examined, diseased conditions noted, and growths and foreign bodies successfully removed from the same.

As far back as 1868, Bevan, of England, described an esophagoscope, made of a straight tube. In 1880, McKenzie also made use of the direct method and extracted a piece of bone from the esophagus. The Germans were next to take up the method and to them is due the credit for making it a safe and practicable procedure. Mikulicz and Kerstein did a great deal of original work, and succeeded in examining the larynx. Kerstein succeeded in a limited number of cases in getting a good view of the larynx, but regarded the further introduction of the tube into the bronchi as a dangerous procedure. In 1897 it remained for Killian to demonstrate the usefulness of this method when he removed a piece of bone from the right bronchus. He also demonstrated the fact that the bronchi possess a high degree of

elasticity, are extensile and may be displaced without ill effect. Killian named his method direct bronschoscopy. These historical facts I obtained from an article in the British Medical Journal, by D. R. Patterson of Cardiff.

The electric light is an essential factor in this method. Either the light of Kerstein, worn on the forehead, or the light at the end of a tube as suggested by Chevalier Jackson, of Pittsburg. Both of these lights have their advantages and disadvantages. My experience however, has been only with the Kerstein light. I will state however, that at some future date I hope to try Jackson's light also.

This method consists in passing straight tubes at will into the esophagus or bronchi. That it has been perfected to such a degree as to make it a most useful procedure to the laryngologist of the future, is to my mind an assured fact. I have seen it clearly demonstrated, and not only this, but I have myself introduced Killian's bronchoscope on four patients, passing it at pleasure beyond the bifurcation and seeing distinctly other divisions of the bronchi. I did this on two patients who had tracheotomies, and two through the larynx. On one patient I passed it into the esophagus as well. To be sure these were trained patients in Killian's clinic, and for that reason the procedure was far easier than it would be on patients who were not so trained, but it nevertheless demonstrates the feasibility of the procedure.

The method is far easier through a tracheal opening and for this reason in many patients it will be better to do a large tracheotomy first. I refer now to examining the bronchi. If the patient is not under the influence of a general anesthetic, a ten per cent. solution of cocaine will have to be used fifteen or twenty minutes before the introduction of the bronchoscope. The cocaine has not only to be applied to the tracheal wound, but also to the walls of the trachea, and especially in the region of the bifurcation, which is very sensitive. If, however, the tube is to be introduced through the larynx, the pharynx, the pillars of the fauces and soft palate also have to be thoroughly cocaineized. In introducing the tube through the tracheotomy wound no especial difficulty will be encountered. However, in introducing it through the larynx, there are many difficulties to be encountered, and it indeed will not be possible in every case, at least until one has had a very great experience. Possibly in not more than twenty-five per cent. of the cases can the direct method be used through the larynx at the beginning. Patients with a very sensitive throat will not submit to this method even after the free use of cocaine. Patients with short necks and those with the canine and incisors of the left side in place are also difficult patients. A hollow tube

*Read in the Section of Laryngology and Otology, of the Arkansas Medical Society, at the Thirty-First Annual Session, Little Rock, May, 1907.

tongue depressor which can be divided into two parts is used, gently passing it down over the tongue to and over the epiglottis which is held down while the bronchoscope is introduced through this tongue depressor into the larynx, the patient either being seated on a stool or box about one and one-half feet high or lying on an operating table with the head hanging far over the table. This same position is also used for esophagoscopy as well.

In introducing the esophagoscope a flexible rubber bougie is passed through the tube and this bougie is then introduced into the esophagus as an ordinary stomach pump. After the esophagoscope enters the esophagus the bougie is withdrawn when the esophagus can be inspected. Killian has had twenty cases of foreign bodies in the esophagus and upper air passages, all of which he has successfully removed by this method, one patient, however, died three quarters of a year later from an abscess of the lung. He has been more successful with this method than others can hope to be. In successfully removing some of these foreign bodies in difficult cases he has added much to his reputation and is today the world's greatest laryngologist.

Just how useful this method will prove in the treatment of diseases of these parts it is yet too early to state. There are many diseases which can be diagnosed in this way and it is to be hoped that in time, suitable treatment will follow.

That this method opens up a new field no one can deny. That it will be the means in the future of saving many lives, is also an assured fact.

DISCUSSION.

Dr. Vinsonhaler: I do not know of any class of cases that so trouble the ordinary practitioner as do cases of foreign bodies in the trachea. They are usually in younger children; very young children. They consist of all sorts of substances which the child accidentally or inadvertently inspires. It has been my misfortune to remove about five cockle burrs from the larynx and upper portion of the trachea.

I was very much interested in the Killian tubes, and hope they will be the means of saving many of these cases. But I find in looking into the matter, and after reading the reports of Mayer, of New York, that in nearly all of these cases in young children where we are obliged to use these tubes we have to do a preliminary tracheotomy. One of the last cases, I believe, perhaps the last, Dr. J. A. Dibrell operated upon, was a case in which a piece of hickory nut hull was lodged in the trachea, and for the removal of which he did a preliminary tracheotomy.

He had a great deal of trouble in locating it, but finally succeeded in getting it out. If he had had at that time a set of these Killian tubes, it would have simplified matters very much. He could have introduced the tube through the incision in the trachea and seen the hickory nut hull without being obliged to fish around for it blindly as he did with a pair of forceps. A man poking a pair of forceps blindly down into the trachea and perhaps into the bronchi is not engaged in a very scientific procedure, to say the least.

This set of Killian tubes I have used but once. One of my assistants used them. He used them in the case of a foreign body in the esophagus, or of a supposed foreign body in the esophagus. The foreign body, however, eluded the tube, or wasn't there originally. But, at any rate, the examination of the esophagus determined that the foreign body was not present.

There is a great field with reference to the diagnosis of diseases of the esophagus by means of an examination with these Killian tubes. With the Killian tubes you can correctly diagnose and locate strictures in the esophagus in the presence of a cancerous growth, lesions of the stomach, as gastric ulcers and other diseases of the gastric mucous membrane. So, as a diagnostic procedure, it is quite a great thing for the general practitioner. The introduction of the tube is not so difficult, as the doctor has explained to you, and the examination you make is full and thorough.

In the adult in removing foreign bodies from the trachea, it is an ideal method. In children, you have to do a preliminary tracheotomy in practically every case.

Dr. Moulton: Dr. Mann is to be congratulated upon having had so complete an experience in the use of the tubes, and the Society is to be congratulated on having heard his paper. The introduction of these tubes into the trachea has marked a distinct progress in laryngology, which the medical profession will soon avail themselves of. Not every practitioner will provide himself with the tubes; not every one of us will acquire the necessary skill in the use of these tubes and the use of these lights to make them practicable to us; but in every community there will be some one who will be prepared to use them, or there should be some one prepared to use them. They will be the means of saving many lives. Just as the doctor pointed out, prior to their introduction we were almost helpless in getting foreign bodies out of the trachea or the bronchi.

Dr. Mann: I have nothing to add. I wish to thank Dr. Vinsonhaler and Dr. Moulton for their remarks.

PERITONITIS AND ITS TREATMENT.*

J. P. Runyan, M. D., Little Rock

Because of the many errors that have been committed during the past fifteen years in the treatment of intra-abdominal lesions, the result of a lack of well-defined conception of the pathology of peritonitis and its many causes, I feel that a discussion, at this time, of the many phases of peritonitis and the causes thereof, together with the treatment found to be most useful in our hands during our eighteen years of experience will not fail to be beneficial, and what I hope to do is to elicit a full and frank discussion from you with a view to comparing notes.

I shall look at the subject from two standpoints. First, with the view of saving life, and secondly, as to disability.

As a matter of course, we must consider the life of the individual. After this part of the subject has been disposed of, the question of how to reduce disability will present itself for consideration. I hope to be able to make myself clear upon this point later on in the argument.

FIRST: What is peritonitis and its etiology?

By peritonitis we mean an inflammation of a part or a whole of the peritoneum. It has for its etiology, an infection by any of the pathogenic germs which may gain entrance into the peritoneal cavity. The avenues through which it may travel by the lymphatics, the blood-vessels, the fallopian tubes, the gall-bladder or ducts, or the gastro-intestinal route. Certainly one of the most frequent and most potent causes is an infection through the appendiceal route, either directly or indirectly.

Peritonitis may be local or diffuse, varying considerably according to the kind of infection and the kind of treatment the patient may receive. I doubt if a peritonitis is ever general, in the sense that the entire peritoneal cavity is inflamed or infected. I like the term diffuse better. Nearly every case of peritonitis, if seen early and given proper treatment, may be localized or prevented from becoming diffuse. If more or less diffuse when first seen, nearly every case may be changed from a diffuse into a localized condition, which later may be relieved by proper surgical interference.

But for the function of the omentum of going to the rescue of any inflamed or infected portion of the peritoneum and glueing itself to that particular part, thus tending to localize and circumscribe the infection, nearly every case of peritonitis would become diffuse, and a great many more fatal cases of peritonitis would be recorded. If

we will only study Nature in her efforts to localize, and render what assistance we may, aided by our knowledge of anatomy, physiology and pathology, we may be able to save the lives of many who are now going to untimely graves. If we study the causes of intra-abdominal pain in peritonitis, and the spread of infection, we shall find one of the most powerful causes to be the peristaltic action of the bowels. We know the bowels to be composed of three coats, one of which is unstriped muscular fibre, whose function is to contract, and not unlike unstriped muscular fibre wherever found in the body, is excited to great activity by anything which may be introduced into the stomach or small intestines.

This principle is often lost sight of by those who attempt to practice the so-called Ochsner method of treatment of appendicitis, by withholding food sufficiently to prevent the patient's receiving sufficient food for the proper nourishment of the body, and enough food and water being given to keep up the peristaltic action, and consequently favor the diffusion of the infection.

Pain (intra-abdominal) is a signal or warning of danger which should not be looked upon lightly and which should no longer be denominated by enlightened physicians as neuralgia of some intra-abdominal viscus and treated by the administration of an opiate, which only alleviates the pain and lulls the patient into a sense of false security, to be attacked again and again, each time being led to believe that it is a condition that should be treated as before, and not made aware of the real condition of the method of relieving the cause, and being permanently restored to a normal condition.

Some of the patients are allowed to have recurrent attacks of peritonitis, each attack rendering the patient's condition more critical, and leaving him with more disability than the preceding one, by virtue of the fact that adhesions may form, causing certain motions of the body to be painful. Others, still, are not so fortunate, and the second or third attack may prove fatal. It may be laid down as a broad statement, that the condition giving rise to peritonitis is one which properly belongs to surgery, and should be treated on broad surgical principles. It may be that immediate surgical interference is contra-indicated, but sooner or later the time will come when that case can best be treated by operative treatment to insure the best and safest results to the greatest number.

It is a safe proposition to say that any case of cholecystitis, salpingitis, or appendicitis of sufficient severity to produce a peritonitis should be dealt with surgically, and any other course pursued is a dangerous risk to which the patient should not be exposed without a thorough explanation of the possible consequences.

*Read before the Annual Session of the Tri-State Medical Society (Arkansas, Louisiana, Texas), held at Shreveport, November, 1907.

Patients, as a rule, are anxious to have done what is shown to be the best method of treatment and what exposes them to the least dangers. If patients in a community do not have the proper treatment, as a rule, it is the fault of the attendant, and not the patients themselves. Doctors and friends of patients cause delay more often than the patient who is suffering. Dilly-dallying and dosing with opiates are responsible for many deaths by delaying operation, not only during one attack, but often many attacks.

After one attack, operation may be comparatively easy, because of the ease with which recent adhesions may be broken, whereas, repeated attacks, or long-neglected cases, require more skill in handling. Other things being equal, it is better to operate during the absence of acute inflammation. Nearly all cases may be directed through the first attack safely if given proper surgical rest.

It is a mistake to think just because one attack did not kill or permanently disable, that the succeeding attacks will be no worse or more severe, and for that reason surgical intervention is not better than long-drawn-out delays and so-called medical or expectant treatment.

If any case be seen early in the history of the disease and a correct diagnosis of the cause be made, undoubtedly the best thing to do is to operate and remove the cause.

If for any reason the case be not seen early, the best treatment is to stop all stomach feeding, withhold water by mouth, and give all nourishment by rectum at regular intervals, with about four to six ounces of saline solution as per Ochsner, and continuing this line of treatment for a sufficient length of time, as may be necessary, for the inflammation to subside. Ice locally applied may be also beneficial in reducing the inflammation and quieting the pain, especially are cold applications beneficial in the early acute stage.

Patients, on whom for any reason it may be thought best not to operate during the acute stage, should be advised and urged to submit to operation in the interval, and the consequences pictured in no uncertain language, if they fail to avail themselves of the proper treatment.

The pulse to the experienced man is the best guide as to the condition of the patient, and whether surgical interference should be immediate or delayed. Certainly, any case in which delay may be counseled because it were dangerous to operate, is of sufficient importance to demand that delay shall be only until such time as the patient may be put into condition to have the best results obtained from surgery, and not be postponed indefinitely, with the vain hope that a second attack will not appear, or, if it does, it

may not be worse than the first attack. Such treatment is too much like playing with fate, and is not practical, to say the least.

Looked at from a standpoint of disability, it is certainly best to operate during the very beginning of an attack, or in the interval between the first and the second attacks, if, for any reason, operation is not done during the first attack.

An operation done at a favorable period in the history of the disease, no matter what the cause, means a short time in bed and a perfectly well patient in the future. From delays we not only have fatality, but also permanent disability, in the form of adhesions, causing pain, probably favoring obstruction of the bowels, and hernia, following drainage for purulent accumulations. Then if we disregard the fact that it is a life-saving proposition to endeavor to avoid delays, and study the economics of the patient, we must ally ourselves on the side of sound surgical principles in the treatment of peritonitis, whatever the cause.

To summarize:

(a) The main principle in the treatment of acute peritonitis is rest.

(b) The best method of securing absolute rest to the bowel, is to withhold everything by mouth for twenty-four to seventy-two hours.

(c) After acute symptoms shall have subsided, small quantities of liquids, first water then nourishment, in small quantities, should be given.

(d) At the first signs of peritonitis, rectal alimentation should be administered at intervals of six hours, until such time as it may be deemed safe to resume stomach feeding.

(e) Ice bags should be applied until all tympanitis disappears.

(f) So soon as it is deemed safe, the cause should be removed by operation in order to prevent a recurrence.

(g) Do not give purgatives, as they defeat the main principle of treatment—rest.

THE VALUE OF THE MICROSCOPE TO THE GENERAL PRACTITIONER.*

By L. H. Hill, M. D., Paragould.

The time apportioned me to read this paper and demonstrate a few charts and slides, prepared from the microscope, will not permit my broadening into the fields of use to which the microscope is of value to the general practitioner.

The use of the laboratory methods in making diagnosis is, for the most part, a growth of recent years. 'Tis true the laboratory examination of the urine has been practiced for some time, but

*Read before the Fall Meeting of the First District Medical Society, held at Paragould, October 8, 1907.

the more complicated hematological, bacteriologic and serologic examinations have come into use only recently, and within this brief space of only a few years the value of the laboratory, and the microscope as an assistant to *early, and differential diagnosis*, has been proven by the fact that today the laboratory and the training in the use of the microscope occupies one of the first places in all our more advanced medical schools, and the laboratory is found in most of the offices of general practitioners who strive to keep pace with advanced medicine.

The general practitioner with this knowledge of the use of the microscope added to his ability for diagnosing diseases from years of experience and clinical observation, places him at the front of our profession. He is able to make an accurate diagnosis much sooner than when waiting for clinical signs, and the patient is spared the suffering of prolonged treatment by radical measures following the correct diagnosis.

The purpose of this paper is not to enumerate the many diseases in which the microscope is of great value in early and differential diagnosis, but I wish to interest you for a few minutes in calling your attention to the microscope as a means of differentiating and diagnosing in the early stages, of two diseases which are of more frequency in our practice than any other,—namely, malarial fever and typhoid fever.

Intermittency is a symptom of several conditions, and clinical signs are not always sufficient to confirm a diagnosis of malarial fever. In this locality there is no doubt but that the term "malaria" has been, and is used, to cover a multitude of diagnostic sins. The clinical forms of malaria as given by Osler, include:

First. The regular intermittent fevers—the tertian, quartan and quotidian—the latter due to a double infection with the tertian organism.

Second. The irregular, remittent or continued fever, the estivo-autumnal type, may be combined in a double infection with the tertian parasite, and cases are on record in which all three forms of the parasite have been demonstrated.

Third. Pernicious malarial fever, which is always associated with the estivo-autumnal parasite. It is in this form that one meets with the so-called "congestive chill," or the "yellow chill," and occasionally hemoglobinuria.

Fourth. Malarial cachexia, the result of cases frequently exposed to infection over long periods of time and not thoroughly and energetically treated. With these types of intermittent fever one is confronted with a case that is very typical and suggestive of several diseases. One might suspect (1) tuberculosis, (2) pyemia, septicemia, or concealed suppuration, (3) pyelitis, (4) ulcerative endocarditis, or even (5) gall-stone.

First. In acute cases of tuberculosis either remittent or intermittent fever is often the initial symptom, the similarity between the temperature curve of malaria and phthisis is often striking. Again, one often meets with a case of tuberculosis which is ushered in with a shaking chill, fever and sweats, and an absence of any physical signs, and occasionally malaria may be ushered in with bronchitis and a cough taking the place of the chill. Here only by an examination of the blood and sputum can a diagnosis be made.

Second. Pyemia, septicemia, or concealed suppuration, not infrequently originates from an insignificant focus which may not be discovered. These serious conditions pursue a course closely resembling malarial fever. The diagnosis of this infection from malarial fever is almost always suggested by a leucocyte count which shows a distinct increase in the number of colorless corpuscles.

Third. Pyelitis, infection of the pelvis of the kidney, as well as certain other inflammations of the genito-urinary tract, are probably more often mistaken for malaria than any other condition: the acute onset, the characteristic remittent or intermittent temperature curve and chill, occurring with peculiar regularity, all suggest malaria most closely. In contrast to malaria there is usually a leucocytosis of moderate degree, 12,000 to 20,000. The blood does not show the plasmodium while one or two urinary examinations will put the physician on the right track.

Fourth. Acute endo-carditis. Coleman, in an excellent article in the *American Medical Journal*, March, 1905, entitled, "The Pseudo-malarial Type of Infective Endocarditis," shows a good many charts illustrating the pseudo-malarial curves, double quotidian, quotidian, tertian, quartan and mixed types. He cites several illustrative cases and states that the paroxysm may be identical with those of malarial fever, presenting the cold, hot and sweating stages with fever—free intervals in which the cold stage may be accompanied by a hard chill. As is known an acute process may attack the heart valves and give no physical signs until broken compensation ensues. The author concludes that the only reliable method is the demonstration of the malarial plasmodium in cases of this disease and its absence in the septic process.

Fifth. Gall stone. One form of cholelithiasis so frequently simulates malaria as to be worthy of special notice; this is obstruction of the common duct with the stone lodged in the diverticulum of Vater, and exhibiting ball-like action. This is apt to give rise to ague-like paroxysms, chills, fever and sweating, the so-called hepatic intermittent fever of Charcot. A careful consideration of all symptoms, the deepening jaundice after each par-

oxysm, presence of bile in the urine and the absence of the malarial plasmodium in the blood, should lead to the correct diagnosis.

Among the other diseases in which may run irregular and intermittent fevers should be mentioned the severe anemias, leukemias, and especially Hodgkin's disease in which periods of pyrexia may alternate with periods of normal temperature, or there may be daily rises of three or four degrees sometimes with a chill and sweat. This may also be said of the fever in the early secondary stages of syphilis and certain malignant diseases.

In children milder forms of osteomyelitis, when not attributed to "growing pains," are often ascribed to malaria. When a child is brought to us with limp paralysis of the lower extremity, the mother is very apt to attribute all this to malaria, when the disease is really one of anteriopoliomyelitis. Again you may have a case of pernicious malaria in which thrombi of parasites occur in cerebral or mesenteric vessels, producing coma and the so-called algid form of the disease, and pass as meningitis, uremic coma, dysentery, yellow fever, or Raynaud's disease.

Malarial cachexia must be differentiated from pernicious anemia, leukemia, splenic anemia, Hodgkin's disease with splenic enlargement; and I maintain that only by use of the microscope and a study of the blood pictures in these atypical cases can an accurate diagnosis be made.

These few cases which I have cited, resembling malaria, will not be diagnosed as such and properly treated until the doctor learns that malaria is a disease having its one etiological factor—namely, the malaria plasmodium, in the blood and easily found by the use of the microscope. The technique is certainly very simple, and as a rule it is not a difficult matter to demonstrate the parasite in either the fresh preparation or in the blood-stained film with any of the good eosin methylene blue mixtures.

In this connection I would like to lay some stress on the importance of a careful examination of the fresh blood which can be done very readily provided a clean slide and cover be used, and a very small drop of blood be taken, thus insuring a thin and well-spread smear. The pigment forms are easily recognized and should not be confused with any structures found in the normal blood. The pigment granules are fine and dark brown in color, while the granulations of the leucocytes are refractile. The plasmodium is naturally contained within the bodies of the red blood cells, although a few extra-cellular forms are seen due to a rupture in some of the cells in making the preparation.

The crescents and ovoids of the estivo-autumnal fever are very characteristic and are readily recognized when seen, but they do not appear in

the peripheral circulation until about the fifth or seventh day of the disease. The demonstration of the young hyaline forms, best found just after a chill, are more difficult, but in a tertian infection attention may often be drawn to a corpuscle containing the parasite by the fact that it is swollen and larger than those surrounding it.

It is generally stated that the parasites are most easily found in stained films, and this is undoubtedly so if they are few in number; this should not discount the general value of the examination of the fresh blood. Certain cases of malaria in which the parasites are so few in number as to be missed in the ordinary examination, may be found by making a thick blood smear. The estivo-autumnal parasite stands out prominently, but the smaller forms of parasites are hidden among the leucocytes present. It is almost impossible to lay too much stress on the value of the leucocyte count in all forms of fever, as it immediately places the case in one of two groups, thus eliminating a large number of possible conditions which, like malaria, may be accompanied by an irregular fever. A differential count of the leucocytes is not a difficult procedure, and in fact can be done at the same time that one is searching for the plasmodium in a stained blood smear by counting and classifying the white cells as one goes over the field.

What has been said of malarial fever may also be said of typhoid fever. There are several diseases whose cardinal symptoms closely resemble typhoid, and each one requires the close observation of the physician to both the clinical and microscopical findings. As one author remarks, "Typhoid fever is not an imitator of disease, but many diseases imitate typhoid fever." The one and most important sign of typhoid fever is the positive Widal serum test. The agglutination of the typhoid bacillus when acted on by the blood serum of the typhoid fever patient, holds as great a position in the differential diagnosis as the demonstration of the malarial plasmodium in differentiating malaria from the diseases simulating it.

The facilities for making the Widal test were for some time only possible in a well equipped laboratory; but its great value has led to where now it is made very practical and can be used by the country practitioner as well as the physician who has all the equipments of a modern laboratory. This is made possible by using the Parke-Davis agglutimeter, and no physician should be without one. While many of the typhoid fever cases are very easily diagnosed by their clinical signs, there are several diseases which resemble it very closely and they call for the "sure sign," or the demonstration of the Widal test and the blood findings. Of a number of the diseases to be differentiated from typhoid fever I will mention a few.

First. Acute miliary tuberculosis, in which the typhoid fever symptoms are more or less present and the diagnostician uncertain as to just what is the disease, here a positive Widal test, finding of the tubercle bacillus in the blood or sputum constitute the only reliable differential evidence.

Second. Pyemia with the marked prostration, irregular fever, the delirium, diarrhea and enlarged spleen which attend some forms, simulates typhoid fever, but a negative Widal test, or a marked leucocytosis with possible findings of a foci of suppuration will eliminate typhoid.

Third. Tubercular peritonitis. This when coming on slowly, continuous slow fever, tympanitis and abdominal tenderness, imitates typhoid fever, and may need the Widal test or the tubercular test to prove a diagnosis.

Fourth. Conversely appendicitis may be taken for typhoid fever, but the addition of the serum test and blood examination to the history and physical signs will settle the differential diagnosis in such case.

Fifth. The more chronic forms of ulcerative endocarditis are commonly diagnosed as typhoid fever: the presence of the Widal test, and absence or presence of leucocytosis will decide this question. Salpingitis of the right side, catarrhal enteritis, especially of children, pneumonia, epidemic influenza of the abdominal form, uremia, trichiniasis, typhus fever, and relapsing fever; these may all simulate typhoid fever by their continuous fever, stupor and abdominal tenderness, but in none of these is the Widal test found, and an examination of the blood will clear all doubt as to the diagnosis.

Now I wish to speak of the close relation in clinical pictures between typhoid fever and malarial fever. That typhoid fever is often diagnosed as malaria is apparent to any one that looks into the statistics as published by the health boards over the country. In the U. S. Census report for 1890, the city of Brooklyn gave the following statistics: For the past six years the deaths from malaria aggregated 1,413, while only 1,002 deaths were attributed to typhoid fever, at the same time Brooklyn was credited with having a remarkably low death rate from typhoid.

Failure to recognize a case of typhoid fever may be due to the occurrence of the chills which must be remembered are not uncommon in this disease. In the first place typhoid fever may set in with shaking chills; typhoid fever at its height is a continuous fever, and the temperature curves rarely show variations of more than a degree; malarial fever, on the other hand, is marked from the outset by remissions of a grade not seen in the early weeks of typhoid. Say what one will, however, estivo-autumnal malaria may simulate enteric fever very closely, and it is in these cases

that the diagnostic importance of a blood examination comes in, and I maintain is of the greatest importance, both a Widal test and a leucocyte count should be made, aside from staining and hunting for the malarial plasmodium.

Investigation has shown that the percentage of the different forms of leucocytes counted in the stained blood-films are of great diagnostic value in differentiating typhoid and malarial remittent fever, and is easily ascertained. An increase of lymphocytes to 40 per cent. or more without any increase in the large mononuclears, points to typhoid fever as against malarial fever. An increase in the large mononuclears to 12 per cent. or over, especially during the remission of temperature, strongly indicates malaria as against typhoid fever. This change is of great value when the parasite is absent from the blood. A high degree of anemia, such as reduction of red corpuscles to below 3,000,000 per c. mm., is much more frequent in malaria than typhoid. A great reduction in the total leucocyte count such as below 2,000 per c. mm., is much more frequently met with in malaria than typhoid, while the proportion of white to red corpuscles in malaria is not frequently less than one to 2,000, which is rare in typhoid fever.

WHAT IS A REPUTABLE MEDICAL COLLEGE.

At the Third Annual Conference of the Council on Medical Education of the American Medical Association, held in Chicago, April, 1907, Dr. Victor C. Vaughn, spoke as follows on "What Constitutes a Reputable Medical College":

The science of medicine is a collection and classification of facts gathered from the various sciences which can be utilized in the cure or prevention of disease. The practice of medicine is the utilization of facts contributed by various sciences in the treatment or prevention of disease. With this as my text, I will say that there are two methods of teaching medicine. The one is reputable, and the other is not. All of us gray-headed men, who graduated twenty-five years or more ago, received our medical education in a class of schools that would now hardly be called reputable. We feel this. We suffer from it every day. I say there are two ways to teach medicine. One is to take the isolated facts from the various sciences which are utilized in the treatment or prevention of disease

and to teach them as isolated facts. That is the way we studied medicine. When we studied anatomy we did not know anything about the development of the human body. We knew nothing about embryology; possibly we saw a few models, but we knew nothing about the evolution of the different parts of the human body. We were taught regional and surgical anatomy that we might have this knowledge, so that we could utilize it in any surgery we might do. We were not taught any of the principles of chemistry; we were taught that it was not a good thing to mix acetate of lead with sulphate of zinc, because a precipitate would be formed, but we had no idea of the general principles of chemistry at all. We were taught that morphin, strychnin and similar bodies are alkaloids and obtained from plants, but as to the nature of the alkaloids we knew nothing. We were taught to use this knowledge by rule of thumb. Now, there are some medical schools still teaching medicine in that way. They are not teaching bacteriology as a science at all. They show this student how to stain the tubercle bacillus; they have a few microscopes, and the teacher gets out a culture of the tubercle bacillus, makes a stain, and shows the students how to stain tubercle bacilli. But they could not make a culture of it; they would not know how to go about it.

I think I am not violating any confidence when I say that there are certain men who teach bacteriology and who start at the beginning of their lectures with a lot of tubes already made. They do not know enough about bacteriology to make cultures. They hold up these tubes and say, "This is a diphtheria culture; this is a culture of tubercle bacillus," and if by any chance a culture goes bad they send and get another. That knowledge is worth something, of course. I have seen a man who had no special training, working as a carpenter, cut a brace to fit an angle with accuracy every time. He never made a mistake, but he did it by rule of thumb. I have been at sea with men who could take the latitude and longitude of ships, but they did it by rule of thumb. They knew nothing about astronomy. That is one way of teaching medicine. Unfortunately, it is a method that is still followed to some extent.

The other way of teaching medicine is to teach the student the fundamental principles of these different sciences which have contributed to medicine; the fundamental principles of physics, of chemistry, of biology, embryology, of bacteriology, and to teach them as sciences apart from their practical application. When a man has been instructed in this way he has within him the capability of growth. He has the foundation; of course, it is not possible for a man to be expert in any one or two of these branches, but every medical student should have the fundamental principles of chemistry, of bacteriology ground into him. He should not only know how to stain the tubercle bacillus, how to recognize the diphtheria bacillus, but he should know how to make culture media, how to grow them, how to differentiate, how to inoculate animals, how to study lesions induced in these animals. It seems to me that right here, in the difference between these two methods of teaching medicine we have a distinction between reputable and a non-reputable college, as we look at it today. One is a scientific training; the other is a rule of thumb training; the one is building on the rocks; the other is building on the sand.

I am free to admit, and I am glad to testify, that the old method of medical education has given us many splendid results. But it has given us these results because the men who studied medicine in the old way did not stop its study when they left school; they have continued, and they have learned scientific methods, have adopted them, and carried them out, and I am perfectly willing and glad to testify that there are many of the poor schools today which are turning out men that will be capable practitioners of medicine. There are some men who will succeed in the practice of medicine, I do not care where they graduate. But the point I want to make is, for the great mass of medical students, for the average student, it is absolutely impossible to give him the scientific education that he ought to have; that he has a right to demand without, in the first place, his having the proper qualifications to build on; and, in the second place, without the school being able to furnish the equipment, the apparatus, the facilities necessary to teach medicine in a scientific way; and.

in the third place, and probably this is quite as important as anything else, and that is, he should have as teachers, scientifically trained men. I think this is the fundamental difference between the proper way of teaching medicine and the improper way of teaching it. I do not like the words "reputable" and "non-reputable."

While I am on my feet I want to say one word more. I was much interested in what Chancellor Kirkland, of the Vanderbilt University, said about the condition of things in the South. I have no fear whatever that the South will, if you give it a little time, recuperate itself and bring forth good medical men. When I am called on by my students to hold up to them the name of

some illustrious American physician, I frequently go to the South. Who was Ephraim McDowell? Who was Bradshaw, who made the first, or one of the first, successful amputations of the hip joint? Who was J. Marion-Sims, a practicing physician in the then village of Montgomery, Ala.? Who was Long, who first utilized anesthesia in the removal of tumors? Above all, who was Walter Reed, a graduate of a Southern medical school; a man who wrote the brightest, and, I might say, the only bright page in the history of American intervention in the affairs of Cuba? So I am not at all afraid that the South will not do its duty in medicine as it has in many other things.

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Editorials.

THE PHYSICIAN IN POLITICS.

Physicians in the United States have not, as a rule, participated in politics to the extent to which the duties of citizenship would imply, and no doubt to this very fact the present chaotic condition of affairs affecting Public Health, can be attributed. To refined, educated and cultured physicians, politics has ever been regarded the synonym of greed, graft and corruption, and so far as the truth of this assertion is concerned ample evidence could be adduced to support the contention. But the conception which has caused physicians to refrain from actively engaging in political battles, has been one without a sound basis, and we are just now awaking to the incalculable injury that has been wrought as a result of this error. Specifically, it has long been held that the "dignity of the profession" would suffer and that acknowledged prestige which the man of medicine naturally enjoys in his community be endangered, should members of a semi-divine profession engage in contests for political offices. And this erroneous belief has been encouraged by the professional politicians so that it is the exception to see more than one or two physicians members of the General Assembly.

The dawn of a great moral awakening is now upon the people, and what the Anti-Saloon League and the Salvation Army have accomplished in their respective spheres, similarly the medical profession through concerted action can secure legislation that will operate in the interest of the health of all the people, and protect them from the machinations of the patent-medicine "System." The following article answers so completely any objections a physician might have for not engaging in politics, that apology is offered to the Journal of the American Medical Association from which it is copied for its complete reproduction here:

"During the past decade various physicians have urged on medical men the duty of taking an active interest in politics. In addresses and writings, Roberts of Philadelphia, Reed of Cincinnati, and Ellis of Los Angeles, to mention only a few of those who have made a practice of their preachments, have spoken with force, albeit with dignity, on this subject. On the other hand, many oppose political activity by physicians. They argue that the physician follows a profession which in itself is all-absorbing and to which, if he would best serve his patients, all his energies, mental and physical, should be devoted; that it is, to an extent, degrading to enter the political arena and to come in close contact with those who are engaged in "practical politics," and that to attempt to use medical organizations to further or to secure political ends is to degrade them to the level of political machines—justly in great disfavor.

In this instance, however, we are not discussing "practical politics," which may be defined as a game played for profit, for the aggrandisement of the individual, the only object of which is to win, no matter by what means. What we are considering is politics in its broadest sense—the art of science of government. This is the meaning that Roberts has in mind when he demands that physicians fulfill their duty and take an active interest in politics, and then goes himself to the primaries, goes to the election booth as an inspector, and spends many irksome days striving to do away with crookedness and political crime. This, too, is the meaning applied by Ellis when he, too, calls attention in no unmeasured words to the duty of our profession to interest itself in politics, and then devotes two or three years of hard, and often unpleasant work, to taking the public school system of Los Angeles out of the reach of political grafters. Surely when these and other earnest men demand that we as physicians busy ourselves with the government of town, city, state or nation, and proclaim it our duty to be active in politics, it is the "art of our duty to be active in politics, it is the "art or science of government" they mean.

The professional man is, consciously or unconsciously, always busied with problems in sociol-

ogy and is led into paths of study of cognate sciences. Any physician, for instance, will appreciate the direct result of typhoid contamination of water supply, not alone as it concerns morbidity, but also in its economic aspects as it affects the commercial activities of the community or the direct monetary loss. What percentage of laymen, taken at large, would have any clear idea of either of these questions? Nearly every state has particular industries which are profitable to its citizens and on the safeguarding of which it spends large sums of money. Yet how many states are there that spend or appropriate even a bare pittance of the money which we, as physicians, know should be expended in safeguarding the health and lives of its citizens?

With the improvement of medical organization which has grown so rapidly since 1900 several state organizations have undertaken to secure improved laws regulating the practice of medicine. Almost in every instance, and at the first effort, has come the knowledge that lawmakers have an immense and almost unlimited ignorance of public health matters and of medical sociology in general. Hence we find that the publications of many state medical organizations have been agitating the necessity for the members of their respective associations taking an active and not a passive part in politics—"the art or science of government."

The principles of preventive medicine are so deeply rooted into the very life of the physician that in asking for public health legislation it seems absurd to him to have his motives questioned. But he overlooks the fact that the lawmaker, through practical experience, comes to regard nearly every piece of proposed legislation as having some ulterior object behind it, or as being intended for some particular and generally selfish purpose. With the potential strength of our profession it is not necessary to go down into the gutter and do "dirty politics" in order to protect the public from harm, as some have preached. Governor Hughes of New York has demonstrated that it is only necessary to put any great truth directly before the people and they may safely be trusted to turn down the "dirty politician" and force him to do the right thing

or get out. To take an active interest in "the art or science of government" it is only necessary to appeal to the awakened intelligence of the people. It is the appeal to the people, to the popular intelligence, to the reasoning power of the individual, that will count for much, if the physician will undertake that neglected portion of his civic duty which is concerned with "the art or science of government."

Selections

APPENDICECTOMY.—Bissell says (Medical Record, Oct. 5, 1907), that the incision should be so made that (1) the offending organ can be safely, easily, completely, and expeditiously removed; (2) the belly wall itself may receive the least possible damage; (3) the shock may be as slight as a capital operation will permit. He reviews the incision of various authorities and expresses his preference for that described by Battle in 1895 consisting of a vertical incision from two and one-half to three inches long, over the right semilunaris, through the skin and back, down to the rectal aponeurosis, which is opened for the length of the skin incision, but a finger's breadth nearer to the median line. The rectus is retracted to the left and the posterior sheath and the peritoneum are cut through together, avoiding the deep epigastric vessels. When the wound is closed it is in three layers of sutures not in line with one another. The four indications in dealing with the stump are as follows: Speed; to do little damage to the tissues about the appendix; to remove or destroy all infectious material; to leave behind no foreign body, or material acting as such.

Bissell's method is as follows: The mesoappendix is tied off by one thread of a double ligature passed close to the base by means of an eneurism needle and the other thread of the ligature is tied around the appendix close to the cecal wall; a narrow artery forceps grasps the appendix a quarter of an inch away from this last ligature. After surrounding the cecum and protecting the peritoneum in the usual manner with gauze tapes wrung out dry with saline so-

lution, the appendix is burned through rapidly with a red hot cautery tip, burning out thoroughly the mucous membrane of the stump. The free ends of the ligature, of which there are two, one for the stump and one for the mesoappendix, are cut off close, unless it is intended to drain. If the wound needs drainage the tips from the ligature around the stump are left long to tie the drain down to later. The nearest piece of mesentery available is laid across the stump and pedicle. It is not necessary to hold it in place by sutures. If drainage is required, a narrow strip of gauze inside a split rubber tube is attached to the base of the appendix by means of the ligature ends left long for this purpose. One of them is threaded into a needle, and with it the catgut is carried through one end of the drain, which is tied down to the appendix stump, the free end being brought out of the lower end of the wound; the ligature tie is cut off close to the stump. This method has been in use at St. Vincent's and Bellevue Hospitals for seven years and has given complete satisfaction.—*Journal American Medical Association.*

INJURIES TO THE CHILD'S HEAD DURING LABOR.—Sachs (*Boston Medical and Surgical Journal*) warns the obstetrician that, other things being equal and, above all, the life of the mother not being in danger, it is wise to curtail the period of labor as much as possible, and not necessarily to wait until the child's heart action becomes feeble. Many children might have escaped epilepsy, idiocy and paralysis if the period of labor had been properly managed. He is firmly convinced that protracted labor is the most powerful factor in producing epilepsy, idiocy, or paralysis in the newborn; one or often all of them are developed, and may be due to conditions present at the time of birth. He further says that the medical men in attendance at confinements have for years followed a policy of indifference toward the welfare of the child, and have allowed too many children to be born into the world after labor unnecessarily prolonged and in conditions that are a distinct disadvantage to society and to individuals for the entire period of their natural lives. *New York Medical Journal.*

FATAL DIPHTHERIA.—Harris has observed, (*Lancet*, Sept. 28, 1907), that in certain forms of diphtheria a fatal ending can with certainty be predicted. The symptoms presented by these cases are as follows: 1. A grayish color of the face, which also presents an anxious expression. 2. Vomiting, which is independent of food and unaccompanied by nausea, being like cerebral vomiting. 3. Abdominal pain, referred to the umbilicus, nearly always present, and sometimes very severe. But there is no abdominal tenderness. 4. Albuminuria is generally present, and often to a high degree (from one-sixth to one-quarter.) There are no tube cases. 5. Suppression of urine is the rule. 6. Alteration in the rhythm of the heart sounds appears after the vomiting has set in. One sound is reduplicated, thus giving the gallop rhythm. The patients are generally very restless and consciousness is maintained until the end. The membrane in the throat is very dark colored and the smell of the breath is most offensive. The writer has seen eight such cases in the last two years, all proving fatal. Antitoxine had not the slightest effect on these cases, 6,000 units being the usual dose. Smears from the throat show large numbers of streptococci and staphylococci associated with diphtheria bacilli. To explain the failure of antitoxine, it is suggested that there may be more than one kind of diphtheria bacillus, each producing a specific toxine which requires a special antitoxine.—N. Y. Medical Journal.

BISMUTH SUBNITRATE CURE IN AFFECTIONS OF THE STOMACH.—An interesting article by G. Lion appeared in the *Archives des maladies de l'appareil digestif*, August, 1907 (through *La Tribune medicale*, August 31st.) He points out in this communication the fact that this remedy was appreciated highly by Trousseau and other physicians of the last century, but its use was almost entirely abandoned; because of the frequency of cases of poisoning, due to impurities in the drug. Recently, its use has been revived, especially in Germany. Hayem, at the Congress of Lisbon, gave a masterly review of its therapeutical applications. In its pure state, as now provided, it is absolutely innocuous. It is especially valuable in all cases of painful gastritis. It acts favorably on gastrorrhagia, and it also

reduces abnormal fermentations. Owing to its chemical effect upon hydrochloric acid, it has been especially employed in the condition of hyperchlorhydria; but, as shown by Hayem, it can be used with equal success in hypopeptics and even among apeptics. The improvement is prompt and the relief very marked in all cases of painful crises of the stomach (early or late pains, cramps, burnings, intolerable pains, sensations of weight, uneasy feelings, unseasonable pangs of hunger, etc.). In severe cases, it may be impossible to give the bismuth at the beginning; but as soon as the acute period has passed, it can be exhibited with the most favorable results. Its calming effects are obtained generally during the second or third day of treatment, but more frequently not until the sixth day. In nervous dyspepsias, and in gastric crises of central origin; only temporary relief can be looked for. In gastric ulcer, its use has become classic, it relieves pain, stops reflex irritation, and its protective properties favor rapid healing of the lesion. Even in cancer of the stomach, its beneficial effects are sometimes remarkable in relieving pain, but they are only temporary, and the patients are obliged to take it constantly. This very fact of its long continued use is an indication of cancer of the stomach which of itself may have some value in a case of difficult diagnosis. Bismuth subnitrate has a positive effect upon the reflex phenomena; retching, vomiting, eructations, which all cease at the same time as the pain. In hæmatemesis or gastrorrhagia, it has been employed with advantage. In place of giving small doses, it is advisable to give a single large dose, once daily, while fasting, of 10 grammes in 150 or 200 grammes of water. In a certain case of ulcer, the author observed this favorable action, and also found that, on discontinuing the remedy, the pains and hæmorrhages returned on two occasions; and that they again ceased upon resuming the treatment. The administration should be kept up for six weeks, in order to secure definite cessation of the accidents. The action of bismuth subnitrate in overcoming abnormal fermentation is of great service in numerous digestive disorders. There is only one contraindication to this remedy, and that is a stenosis of the gastrointestinal canal, wherever

situated. In a case of cicatricial stenosis caused by a stomach ulcer, Hayem found a semisolid mass of bismuth held together by mixture with mucus, and constituting a real foreign body, the formation of which should have been avoided. In cases of moderate stenosis, single doses of bismuth may from time to time be given with advantage, providing its elimination be carefully supervised. The tendency to constipation, which has been alleged to be caused by bismuth, is rarely seen, and when it occurs is easily overcome by enemata of olive oil, or by simple injections. Sometimes its prolonged use is attended by looseness of the bowels; but this is readily controlled by suppressing the remedy for a time, or by diminishing the dose.—*N. Y. Medical Journal*, Oct. 19, 1907.

TREATMENT OF ANEMIA.—Curran Pope in a paper read before the Kentucky State Medical Society (*N. Y. Medical Journal*, November, 1907), after dismissing iron and arsenic as possessing but little value in this condition, says:

"Hydrotherapy, tonic in its nature, has been reserved for final consideration because it is more nearly a panacea for the correction of anemia and its allied and correlative conditions than any other measure known to the profession. I shall call attention to this fact elsewhere. The first point in hydrotherapy is to insist upon the internal use of water. By this method we secure a diluent of the blood which possesses active oxidative and metabolic power. I shall also show that where the amount of food, etc., remains the same the simple addition of an increased quantity of water results in an augmenting of corpuscular and hæmaglobin richness, as well as increasing sometimes the flesh gain. Water increases the elimination of waste materials from the body, not as is generally supposed by "washing out" the tissues and eliminating waste material "through the kidneys," but by raising blood pressure and thus increasing renal activity. While it is true that uneliminated urea lying in the tissues is dissolved and eliminated, still the general statement made holds true. For the reasons enumerated it should be drunk every hour or two, as by this means the blood pressure is raised. Hydrotherapy acts in no uncertain manner upon the circulation; it slows the heart, and

increases the effectiveness of its contraction; tonically it dilates the superficial blood-vessels and raises blood pressure. It deepens the respiration, enhances the gaseous exchange of oxygen and carbon dioxide, thus favoring all oxidative and metabolic processes in the body. It directly stimulates and increases secretion, absorption, and excretion; improves the appetite, betters the digestion, increases the absorption of food, overcomes atony of the intestine and its associated constipation. The muscular system is strengthened, its power, both in the skeletal and visceral forms, being greatly enhanced, as has been demonstrated repeatedly by several experiments. Upon the blood directly, Thayer has shown that tonic hydrotherapy produces a marked increase in the leucocytes, followed by repair of tissue and healing, and that even in typhoid fever the phagocytic process is much enhanced, while Metchnikoff has shown that with the increased leucocytosis there is a corresponding rise in the opsonic index. Strasser has shown by a masterly series of experiments and observations that tonic hydrotherapy in its many forms not only increases the alkalinity of the blood by diminishing the acid phosphate, but lessens its density, at the same time increasing the number of red cells. It stands to reason that with a more fluid blood, of greater alkalinity, with increased cells to take up the storage iron, with better elimination and a blood free from toxins, tissue repair takes place and every function and every cell bathed in this necessary fluid rejuvenates, thus confirming the adage of Holy Writ that "The blood is the life." In addition it tones, sustains, and invigorates the central nervous and sympathetic systems, enabling them to send forth normal and proper impulses, and thus arouse control, and regulate every living cell of the human organism. Granting its great power in this direction it becomes essential to carefully study the methods by means of which these much to be desired results can be obtained.

We may consider two classes of cases, bedridden and ambulatory. Commence in the first class with the daily use of a dry blanket pack, enveloping the patient tightly in same for twenty to forty minutes in order to collect heat upon

the surface, this to be followed by the cold sponge or ablution at 70 degrees to 50 degrees F., followed by good reaction and general body friction. When the patient's reactive power has been well developed by this method we may substitute for the pack and sponge the following: While the patient stands in a very hot foot bath, the "dripping or sheet bath" is given with vigorous friction, duration three minutes, commencing with a temperature of 70 degrees F., reducing 2 degrees daily to 60 degrees. It should be given in the early morning as an opening procedure for the day. The German clinicians, and I agree fully with them, find the full wet pack at 65 degrees F. for one hour a most excellent measure in these cases. My plan is frequently arranged as follows: All the hygienic, dietetic, and other measures are arranged for, and just as soon as possible the patient is given the dripping sheet in the morning and the full wet pack in the evening. Where this is done it will be found that the accompanying nervous symptoms and insomonia rapidly disappear."

ENURESIS IN CHILDREN.—Arturo Cavaliere (*Riv. di Clin. Ped.*, March, 1907) finds that the reason for the unsuccessful methods used for treatment of enuresis in children is the lack of accurate knowledge of the causes of the condition. Unless we know the cause in a given case we cannot properly direct our therapeutic measures. He defines enuresis as a condition of involuntary evacuation of the bladder in children over two years of age, who have normal brains and no anatomical lesions or lack of development. This definition will exclude all children who have hereditary or congenital brain troubles or deformities; all spinal cord troubles, epilepsy, and diabetes, as well as those affected by fear. He considers separately the direct and remote causes of the condition. The condition is essentially a neurosis, and we constantly find hereditary neurotic conditions as the remote cause. According to some, the anatomical substratum of the condition is a hypoplasia of the central nervous system, and it is a true symptom of infantilism. According to others it is a manifestation of hysteria. The immediate cause is a hyperexcitability of the *detrusor*

vesicae with a relaxation of the sphincter of the urethra. According to another theory, it is due to a lack of development of the prostate resulting from lack of closure of the bladder orifice. Four forms are recognized by the author, in all of which the usual dietetic and hygienic measures are useful. In hyperexcitability of the detrusor, extract of belladonna administered at night in increasing doses is the best remedy. Valerian and hot baths are also useful. When there is deficiency of the sphincter of the urethra strychnine hypodermically is useful, also cutaneous faradization over the bladder and sacrum. For reflex enuresis the removal of the cause is the proper treatment. With deficient muscular apparatus of the prostate and non-closure of the bladder there are usually other deformities. Massage and dilatation of the urethra are useful. The most modern measure is the injection of physiological salt solution into the *hiatus sacralis*. Most brilliant results have been obtained by Cathelin. The effect of the injections is supposed to be a stimulation of the roots of the nerves.—American Journal Obstetrics, September, 1907.

NEW AND NON-OFFICIAL REMEDIES.

The following articles have been tentatively accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in the proposed annual, "New and Non-Official Remedies." Their acceptance has been based largely on evidence supplied by the manufacturer or his agent, but to some extent on investigation made by or under the direction of the Council. Criticisms and corrections are asked for to aid in the revision of the matter before final acceptance and publication in book form.

The Council desires physicians to understand that the acceptance of an article does not necessarily mean a recommendation, but that so far as known it complies with the rules adopted by the Council.

W. A. PUCKNER, SECRETARY.

APOIL.

APOILUM CRYSTALLISATUM. PARSLEY CAMPHOR.

Apoil, $\text{CH}_2:\text{CH}.\text{CH}_2.\text{C}_6\text{H}(\text{OCH}_3)_2:\text{O}_2:\text{CH}_2 = \text{C}_{12}\text{H}_{14}\text{O}_4$, is 2,5-dimethoxy-3,4-methendioxy-12-propenyl-benzene, derived from 2,3,4,5-tetrahydroxy-1-propen (12)yl-benzene, $\text{C}_6\text{H}(\text{OH})_4(\text{CH}_2\text{CH}:\text{CH}_2)$.

Apoil may be obtained by extracting the oleoresin (oleoresin of parsley seed, which see) with ether and subsequent purification. It may also be obtained by submitting parsley seed to steam distillation, cooling the volatile oil and collecting and purifying the crystals which separate.

Apoil crystallizes in long needles, having a faint odor of parsley, melting at 30 C. (86 F.) and boiling at 294 C. (561.2 F.). It is insoluble in water, but readily soluble in alcohol and ether. With strong sulphuric acid it forms a blood red solution. Apoil is not affected by aqueous solutions of potassium or sodium hydroxide, but by alcoholic solution of potassium or sodium hydroxide it is gradually converted to isoapil, which melts at 56 C. (140 F.).

Actions and Uses.—Apoil is said to produce a cerebral excitation very similar to that induced by coffee and in larger doses a species of intoxication, with vertigo, ringing in the ears and severe frontal headache.

Apoil has been used as an antiperiodic, but is regarded as of inferior rank for the purpose. It has also been recommended in the treatment of amenorrhea.

Dosage.—0.13 to 0.3 Gm. (2 to 5 grains) in capsules, as an emenagogue. 0.3 to 1 Gm. (4 to 15 grains) as an antipyretic.

CHOLOGESTIN.

A liquid of which each 15 Cc. (4 fluidrams) is said to contain the amorphous sodium salt of glycocholic acid, 0.13 Gm. (2 grains); true sodium salicylate from the natural oil of wintergreen, 0.16 Gm. (2 1-2 grains); pancreatin, 0.3 Gm. (5 grains); sodium bicarbonate, 0.3 Gm. (5 grains) in a menstruum containing 15 per cent. alcohol.

Actions and Uses.—Chologestin is claimed to be a biliary and intestinal antiseptic. It is said to increase the flow of bile and to aid in the digestion of fats. It is said to be useful in the treatment of flatulence, distension, catarrhal conditions of the biliary passages and constipation due to hepatic torpor.

Dosage.—15 Cc. (4 fluidrams) in water or other non-acid vehicle three times a day after meals.

Prepared by F. H. Strong Co., New York. U. S. trademark No. 61767.

DIAZYME ESSENCE.

A liquid stated to contain the amylolytic enzyme of the pancreas, devoid of trypsin and lipase in a menstruum containing 18.5 per cent. of alcohol by volume.

Diazyme essence is an amber fluid of aromatic taste and odor and slightly acid reaction.

One Cc. will convert 200 Gm. of pure starch mucilage, containing 8 Gm. of dry starch, the mixture being kept at 40 C., so that the solution will cease to give a color reaction with iodine at the end of ten minutes.

Actions and Uses.—Diazyme is capable of digesting starch and is said to be useful to compensate for deficient salivary and pancreatic action in the digestion of starch.

Dosage.—4 to 8 Cc. (1 to 2 fluidrams).

Manufactured by Fairchild Bros. & Foster, New York. U. S. trademark No. 44878.

DIAZYME GLYCEROLE.

A liquid stated to contain the amylolytic enzyme of the pancreas, devoid of trypsin and lipase, in a menstruum containing about 60 per cent. of glycerin by volume.

It is a dense amber fluid, of agreeable taste and odor, and of slightly acid reaction.

One Cc. will convert, at 40 c., 200 Gm. of pure starch mucilage, containing 8 Gm. dry starch, so that the solution will cease to give a color reaction with iodine in 10 minutes.

Actions, Uses and Dosage.—See Diazyme Essence.

Manufactured by Fairchild Bros. & Foster, New York. U. S. trademark No. 44878.

EMULSION CLOFTLIN.

EMULSION OLEI MORRHUAE CLOFTLIN.

Each 30 Cc. (1 fluidounce) is said to contain calcium hypophosphite, 0.4 Gm. (6 grains); manganese hypophosphite, 0.2 Gm. (3 grains); glycerin, 3 Cc. (50 minims); cod liver oil, 15 Cc. (4 fluidrams).

Dosage.—15 Cc. (4 fluidrams).

Prepared by the Cloftlin Chemical Co., New York.

OLEOESIN OR PARSLEY SEED.

OLEOESIN APII. APIOL, GREEN.

An oleoresin obtained from parsley seed by extraction with alcohol.

Parsley seed is extracted with alcohol, the alcohol recovered, and the liquid portion of the residue freed from the solid waxy matter which separates on standing.

Oleoresin of parsley seed is a greenish, oily liquid, insoluble in water, but soluble in alcohol, ether, and chloroform. Sp. gr. about 1.05.

Actions and Uses.—See Apiol.

Dosage.—0.3 to 1 Cc. (5 to 15 minims) in capsules.

REGULIN.

A mixture of agar-agar in a dry form with extract of cascara sagrada representing 20 per cent. of an aqueous fluidextract of cascara sagrada.

Regulin is in the form of brown scales which slowly absorb water to form a jelly. It is odorless and tasteless.

Actions and Uses.—When taken into the stomach, regulin absorbs water which is said to be retained throughout the intestinal canal, and, as the material is indigestible, the bulk of the feces is increased to correspond to the amount of water absorbed. It is non-irritating and softens the fecal masses. Some laxative action is exerted by the cascara sagrada.

Regulin is recommended for the treatment of habitual constipation.

Dosage.—From a teaspoonful to a tablespoonful once daily in stewed apples, mashed potatoes or similar food.

Prepared by the Chemische Fabrik, Helfenberg, A. G., near Dresden, Germany. (Reinschild Chemical Co., New York.)

TANPHENYFORM.

Tanphenyform is a mixture said to be composed of tannin albummate 63.9 parts (approximately equivalent to tannin 35 parts), hexamethylenamine 8.3 parts, phenyl salicylate (salol) 27.8 parts.

Dosage.—0.6 to 2 Gm. (10 to 30 grains) 3 to 5 times a day. It is supplied in the form of a powder and also in 5 and 10 grain capsules.

Prepared by Wm. R. Warner & Co., Philadelphia.

CONTRACT PRACTICE.

On several occasions correspondents have asked whether or not the position of railroad surgeon comes under the head of contract practice—a question of such a general character as to make it impossible to answer it satisfactorily without discussing the entire subject. Contract practice is of such vital importance that it seems worth while to discuss the entire subject with special reference to the fundamental principles involved.

In one sense, all medical practice is contract practice, since the courts have held that when a physician assumes charge of a case there is a contract, implied if not expressed, between him and the patient (if of legal age, or, if the patient be an infant, between the physician and the parents or guardian). Legally speaking, a contract is simply an agreement to perform certain acts for a certain consideration. There is no reason why a physician should not enter into a contract with an individual, firm or corporation the same as any other citizen so long as he does not infringe on the rights of any one else; the majority of cases of so-called contract practice, however, do so infringe, and are therefore objectionable.

Admitting that all forms of medical practice are contract practice and that there is no reason why a physician may not enter into a contract as may any other individual, what are the particu-

lar forms of contract practice in which there is an expressed contract rather than an implied one? For convenience, we may classify such contracts under three heads:

1. Contracts entered into between a physician and an individual for purely personal purposes, such as the employment of a physician by a wealthy invalid traveling for his health and desiring the entire services of the physician. In such a case, the relations between the physician and patient would be exactly the same as would obtain between any physician and patient—entirely a personal matter. The physician would presumably charge what he considered his services worth. The rights of no one else would be in any way invaded.

2. Contracts between a physician, on the one hand, and corporations or business organizations of any kind on the other hand, such as contracts with railroads, mining companies, large manufacturing companies. The object of such a contract is not benevolent or philanthropic, but is purely an interested one on the part of the firm or corporation, in that experience has shown that it is necessary for the company, in order to protect its interests and to prevent, or to successfully defend, unjust suits for damages brought by employes, to have a competent physician and surgeon in the employ of the company who can examine all employes injured in the discharge of their duties. In some cases, there is a mixed motive, and the action of the company is partly benevolent and partly co-operative and socialistic. An illustration of this is found in the benefit organizations of some railroad companies, in which the employes are given medical attendance and hospital care for diseases and injuries other than those contracted or sustained in the service of the company. The economic justification for this is found in the fact that it is to the interest of the company to keep its employes in good health. The animating motive, however, which has led industrial organizations and large corporations to employ surgeons and establish hospitals has been, primarily, self-protection. It should also be noted that, under present economic conditions, such self-protection is an economic necessity to the success of any large busi-

ness or one employing large numbers of men. This phase of the question will be discussed more fully later on.

3. The third form of contract practice is that in which a contract is entered into between the physician and an organization, made up of voluntary members not established for any economic or commercial enterprise, but purely for social or fraternal purposes. Under this heading come all fraternal orders, lodges, benevolent associations, etc., which have been recently organized in such large numbers. Possessing generally some peculiar feature, such as fraternal life insurance, weekly sick benefit, etc., there has been grafted on to this plan, as an additional drawing card, the plan of furnishing medical care to members and their families at a purely nominal price. A lodge or society having two or three hundred members will levy a sick benefit of \$2 per year on each member, and with this amount will employ a physician under a contract which requires him to furnish medical attendance, and in some cases medicine, to members alone or to members and their families, whenever he is called on to do so. This form of contract practice is what is known as lodge practice or club practice, and is a development, in this country, of the last fifteen or twenty years.

4. A fourth form of contract practice, and the lowest of all, is found in the burial and aid associations, which are really industrial insurance companies, with free medical attendance as an added inducement.

It will be found that practically every form of contract practice is included under one of the four headings. Let us now endeavor to ascertain what, if anything, is objectionable, about any of them, and if so, why and on what grounds such methods of practice should be condemned.

As to the first form, we are unable to see how a contract, whether written or verbal, between a physician and a single individual for certain professional services for a certain amount, differs except in degree from the agreement expressed or implied between a physician and any of his other patients.

The distinct feature about the second form of contract practice described, and that which differentiates it from the third form is that in the case of railroads, mining and lumber corporations, large manufacturing concerns, etc., proper care of employes injured in the performance of their duties is an economic necessity for the successful conduct of the business, and is one which has grown up through appreciation of this necessity. Surgeons are not employed by railroad companies, for instance, for the sake of the individual employes, but purely because experience has shown company surgeons to be necessary. Another reason is that large corporations are frequently the object of suits brought by employes for damages sustained through injuries. Experience has shown that it is necessary for a company to have a competent physician to represent it, and to make an examination and to report at the time of the injury in order that the company may have a record of the injury. If railroad companies, both steam and electric, and large manufacturing concerns, etc., did not take such precautions they would suffer great loss and perhaps even be wiped out of existence by damage suits in the course of a few years. Such protection is an economic necessity.

In the case of mining and lumber companies, an additional factor must be considered. Many mines, large lumber camps and saw mills are located at isolated points. Their location is not a matter of choice, but of necessity. A body of ore is discovered and a mine developed. Around this mine will be built a small village or town, in which the sole interest is the mine, the one thing which brings men to the place. Perhaps the number of employes or the number of inhabitants of the town is too small to justify a competent surgeon in locating there. As both company and the employes need competent medical service, an arrangement is frequently made by which the company pays a surgeon a fixed amount, and, in most instances, deducts a pro rata amount from the wages of each of its employes. Aside from the reasons mentioned, the justification for this form of contract practice is found in the fact that the isolation of a mining or lumber camp practi-

cally removes it from the competitive conditions which obtain in more thickly settled and more accessible communities.

From the above considerations we may conclude that contract practice is not only unobjectionable, but is justifiable, when there exists a plain economic necessity for it or when the circumstances under which it develops are such as to rule out the usual competitive conditions found elsewhere, provided the conditions, rate of compensation, etc., are equitable. It should be emphasized, however, that unless the company surgeon is the only available man and consequently, not in competition with another physician, there is no reason why the company should require the surgeon to furnish medical services to the families of the employes as part of his work for the company.

Taking up now the third form of contract practice, that in which an agreement is entered into by a physician with a lodge, club, society or other organization, we note, first, that there is no economic excuse or justification for this sort of practice. If a man works for a certain railroad company, that company has a perfect right to say as one of the conditions of his employment that if he is injured he shall be examined, if not attended, by a medical representative of the company in order that the truth regarding his injury may be known to the employing corporation. There is no reason, however, why the fact that a man belongs to a certain lodge should entitle him to professional services at a few dollars a year, while his neighbor, living under exactly the same circumstances and drawing, perhaps, the same wages, but not belonging to the lodge, has to pay a much greater price for the same services. In other words, medical attendance is not an economic necessity for lodges or fraternal organizations, but is simply an added feature for the purpose of procuring members by offering them the inducement of medical services at a purely nominal figure. If the organization is a social and fraternal one, medical attendance is not necessary for its existence. If the organization has no other object than to furnish medical service, then the organization exists solely for the pur-

pose of buying medical services at wholesale rates and selling them to its members at retail rates.

The objections to lodge practice are:

1. There is no reason for the existence of such a system. This has been discussed above and will not be further considered.

2. In making such a contract, a lodge asks the physician to give an indefinite amount of services for a fixed amount of compensation. The usual plan is that a physician is paid a certain amount per member per year for whatever attendance they may require. If the member or his family are not sick at all, then they pay for something they do not receive. If the member and his family have a great deal of sickness during the year, then they receive something for which they do not pay.

The plan practically amounts to a bet between the member and the doctor as to whether or not the member will be sick during the year. The member puts up \$2 and the doctor puts up unlimited services. If the member is not sick, he loses, and if he is sick, the doctor loses.

The principles of fixed, limited compensation for indefinite, unlimited services can not be defended on any grounds. It might be argued that the same objection applies to railroad and company work, as outlined above. But the surgeon employed by a company is employed not for the purpose of rendering personal services to the individual patient, but is employed as the medical representative of the company. His relations are not those of a physician to an individual patient, but are those of a medical advisor to a company, for which he receives such compensation as may be agreed on.

3. The third objection to lodge practice is that it invariably introduces the element of ruinous competition among physicians. If one doctor agrees to do lodge practice for \$2 per member per year, some cheaper man will soon agree to do the same work for \$1.50 per year. In this way, the price of medical services is reduced to a ridiculously small amount. This, in turn, affects the quality of services rendered and thus works harm to the patient, the family and the entire community.

This objection will also hold against railroad or corporation work, where physicians are induced or allow themselves to underbid each other.

4. From the standpoint of both the patient and the physician, the greatest objection to lodge and club practice is that the physician can not afford to give good services for the amount he usually receives, while his compensation is not in any sense affected by the quality of his services. It therefore follows that the physician gives poor services and the patient receives poor services. This is detrimental to all parties concerned.

So far as the fourth form of contract practice, viz., sick benefit and burial societies, usually known under some high-sounding name, which issue policies to the poorer class of working people, providing them with medical services, medicine, etc., sometimes at as low a rate as 10 cents a week, this is the lowest form of contract practice, for which absolutely nothing can be said in defense. The promoters of these organizations are simply farming out the services of the physician, buying them wholesale at the lowest possible price and selling them at retail for all they can get and realizing the difference as their profit. The report of the Bureau of Associated Charities of Chicago, made through the Committee on the Abuse of Medical Charities of the Chicago Medical Society last spring, showed that in some cases the total compensation paid to physicians employed by these companies amounted to 24, 51 and 75 cents per month. Such contracts are degrading to the patient as well as to the physician, and are pauperizing to both. They should not be tolerated for a moment; there is no excuse for their existence. Patients not able to pay more than the sums mentioned can always be taken care of in public dispensaries and charitable institutions. Physicians who are willing or who are compelled to work for such prices are a menace to their patients and to public health on account of the quality of services which they must necessarily render. They should not be tolerated by the public, to say nothing of the profession.

In the light of the above, it becomes evident that a railroad surgeon is unquestionably a con-

tract surgeon. In the case of railroad companies, there is an economic justification for the contracts which they enter into with physicians and surgeons, which has developed from the necessities of the case. So long as the contract between the railroad company and the individual surgeon does not infringe on the rights of others nor introduce the element of ruinous competition between physicians, there is no reason why any exception should be taken to such an arrangement.

We are free to say, however, that we consider that the prevalent custom among physicians in smaller towns on railroads of accepting a position as railroad surgeon for the sole compensation of an annual pass is belittling both to the individual surgeon and to the profession, and many a good man has been ruined thereby. It should be eliminated by the surgeons themselves. Good work, properly done, entitles one to proper compensation. The railroads must have competent surgeons for their own protection. They are perfectly willing to get as many men as possible on a transportation basis, since it is much cheaper for them, but if they were not able to obtain good men on this basis, they would prefer to pay cash rather than to accept services of poorer men or to do without any medical services. There is also no excuse for the purely nominal compensation in many cases. There is no reason why railroads should not pay a reasonable price for good services. They will do so, just as the insurance companies have done, rather than accept poor services, since they know that cheap men are the most expensive in the long run.—*Journal American Medical Association.*

STANDARDS OF MEDICAL EDUCATION
ADOPTED BY THE AMERICAN
MEDICAL ASSOCIATION,
JULY, 1905.

STANDARD NOW RECOMMENDED.

The minimum standard now recommended prerequisite to the practice of medicine is as follows:

1. (a) The preliminary requirement to be a four-year high school education or its equivalent,

such as would admit the student to one of our recognized universities; (b) and in addition (as soon as conditions warrant), a year of not less than nine months, devoted to the study of physics, chemistry, biology and one modern language, preferably German, to be taken either in a college of liberal arts or in a recognized medical college having a preliminary year devoted exclusively to the subjects mentioned.

2. There should be a requirement that previous to matriculation in a medical college every student must secure from the State Examining Board a "medical student's entrance certificate," which would be issued either on presentation of credentials of preliminary education not less than that laid down by requirement one, or on passing an examination given by the Board, and which will satisfy the Board that the student has an equivalent education.

3. A medical training in a medical college, having four years of not less than thirty weeks each year, exclusive of holidays, of thirty hours per week of actual work.

4. Graduation from an approved medical college required to entitle the candidate to an examination before a state examining board.

5. The passing of a satisfactory examination before a state examining board.

THE IDEAL STANDARD.

The ideal standard to be aimed at from the present view-point, should consist of: (A) Preliminary education sufficient to enable the candidate to enter our recognized universities, such qualifications to be passed on by the state authorities. (B) A five-year medical course, the first year of which should be devoted to physics, chemistry and biology, and such arrangements should be made that this year could be taken either in a school of liberal arts or in the medical school. Of the four years in pure medical work, the first two should be spent in laboratories of anatomy, physiology, pathology, pharmacology, etc., and the last two in close contact with patients in dispensaries and hospitals in the study of medicine, surgery, obstetrics.

and the specialties. (C) A sixth year as an interne in a hospital or dispensary should then complete the medical course.

Under such a scheme, the majority of men would begin the study of medicine between 18 and 19 years of age, and would graduate from the hospital internship at from 24 to 25. A college education is recognized as a desirable preparation for a limited number of men, but it is thought that it is not and never will be desirable to make such college education a requirement to the study of medicine, as it would make the age of graduation from 27 to 28 years, which is regarded as too old a period at which the young medical man should begin his life's work. It is obvious that this very desirable scheme of requirements can not be at once demanded or recommended.

Communications

SHOULD THE UNDERGRADUATE BE ADMITTED TO FULL MEMBERSHIP IN THE COUNTY AND STATE SOCIETIES?

To the Editor: Complying with your request to contribute something for the JOURNAL on the above subject, I shall take it for granted that you wish both sides of the question discussed, and in addition my opinions given and the reasons why I entertain such opinions. I shall preface my remarks by saying that I think the subject is probably overstated in that I think there should be restrictions thrown around the admission of the undergraduate to full membership in the county and state societies. Such restrictions will be noticed futher along. My remarks will be in the nature of a friendly talk and I trust will be accepted as such—only individual ideas concerning this matter. However I do not want to be understood as favoring a continuance of the licensing of the undergraduate. That is a different question. But I emphatically do not favor any law admitting any one to even come before a Board unless such be a graduate.

I shall not take up the law on this subject, as it has been discussed in a former issue of this JOURNAL, but shall confine myself to the justice of the admission of such applicants to membership in our societies. The makers of our Constitution and By-Laws have given this one question more thought, than perhaps any member of any State Society in the Union, and they have unanimously decided that it is for the best that the under-graduate should be a member of his county society. I fully concur in this decision, and it is my opinion that, as we have the undergraduate with us, he should be admitted to membership, *provided*, he is a legally authorized practitioner of medicine. I believe that the legalized undergraduate who is practicing medicine, (for a specified length of time only) should be admitted to membership. At the expiration of this time no one should be admitted to membership who is not a graduate.

My reasons for this may be briefly stated, as follows:

First. The undergraduate who is legally practicing medicine and is now old and at an age where he cannot expect to graduate, should be admitted; and the young undergraduate who has been practicing between courses of lectures and striving to graduate should be encouraged along with the older one who can never be expected to graduate, owing to age, inability, etc. I believe that all of this class, and, in fact, others, should be given an opportunity to come into the medical societies, and every possible encouragement should be given such to graduate. We have the undergraduate with us, practicing medicine, holding a license given by the State Board. These are good citizens, and, in some instances, fairly good practitioners, and in many instances excellent practitioners for the opportunities they have had. We recognize them as citizens, as neighbors, as friends; and just why they should not be given recognition professionally is something that I cannot understand. The opposition to the admission of the undergraduate to the medical society lay entirely too much stress upon the possession of a diploma.

The dean of one of the leading medical schools of this country once told the writer that he had take seven courses of lectures and still was not a graduate. Acting upon this theory this man would not be entitled to admission into our county society; yet, he was teaching in one of the leading medical colleges of the United States and was recognized, and is recognized as one of the greatest teachers of his age. (He has since graduated, taking honors in everything that he competed for).

The one thing that is held up as a reason why this class of practitioners should not be admitted to membership, is the possession of a diploma. Standing in the community, both professionally and morally, seems to have no such bearing on the subject as the diploma qualification. I do not mean that every undergraduate who is a legalized practitioner of medicine should be taken into the society; to be sure not. Each county society is judge of the qualifications of its own members, and though such an one is not qualified to a degree where he possesses a diploma, I would not favor his admission into the county society if his morals were not right, any more than I would one who had a diploma, but whose morals were bad. I am not in favor of admitting to membership an undergraduate, or a quack, or any other man who is guilty of unprofessional conduct or bad ethics, were he the possessor of diplomas from every school in the land; but I do say there is no good, valid reason why a clean moral, upright licensed undergraduate should not be admitted as a member of the county society and encouraged to graduate.

It may be selfish to intimate that these people are better on the inside than they are on the outside, that goes without saying; but there is still a higher motive in view and more noble object to be attained. Selfishness should be brushed aside. Narrowness should not be countenanced when placed in the scale with generosity and charity.

You ask, what this is? It is this: The fundamental principle of organized medicine is the broadening of the intellect, and the association of physicians together, to give and exchange ideas tend, to this one thing. Then if the

graduates band themselves together to derive these benefits from such association and deprive the undergraduate of the privilege and the good that we might do him, are we acting justly to him? Are we treating the people, whose lives are in his hands with the same charity we would like to have extended to us when we were undergraduates? Is it fair, is it right for us to act like a sponge, absorbing all that we can and give out nothing—only when squeezed? Should we not go forth, doing all the good that we can in every way that we can? One way is to take the undergraduate who is eligible to membership, by being clean morally and professionally and otherwise, into the Society and let him imbibe from us the spirit of progress. Let's teach him all that we can. This will be more far reaching than we have any conception of, and the fact is plainly to be seen that those families whom he treats, will be deriving the benefits, while it costs us nothing, only the surrender of a sentiment that is fast passing away. I say sentiment, because it is a sentiment and nothing more. The states of Kansas, Texas, Missouri, Illinois, Kentucky, and quite a number of others are admitting the qualified undergraduate to membership, and have been doing so for the last two or three years. They have found that it is not a detriment to the professional interests nor to professional standing to associate with these people on the inside of the Society—no more so than to associate with them on the outside. In fact, the Secretary of the State Medical Association, Texas, says that every county society in his state admits them, except one and that one was so dignified that refusing to admit the undergraduate, it has long since died of dignity, no report having been received for two or three years from this county society.

Again, if we possess knowledge that we refuse to impart to a brother practitioner, although he be an undergraduate, and such knowledge would be the means of saving some one's life or relieving them of suffering, are we not, to say the least of it, indirectly responsible? I say we are.

Again, these people are not doing organized medicine any good; but, on the other hand,

in a great many instances, they are doing it untold harm. Their influence is felt in various directions and always antagonistic to the principles as set forth in organized medicine where if they were on the inside and were educated as to what organized medicine stands for, the good that is being done by organized medicine, the high and lofty purposes of such organization, they would right about face and lend their influence to the county society where they held membership.

Again, the contributions received as dues from this class of members would only help us to make a better society than we have, and in so helping would help them too.

What good comes from keeping these people on the outside? Can any one point to one single advantage that is being derived by denying them membership? Are they receiving any benefits themselves by being out? Are we receiving any benefits by keeping them out? Do their patients receive any benefits from our sentimental selfishness? It seems to me that the answer to all of these questions is negative.

In other words, we have all to gain by admitting the clean, moral, upright, legalized practitioner, who is an undergraduate, and nothing to lose. He has everything to gain and nothing to lose. His patrons profit more than he does or more than we do; the community at large has a better physician in such a man than they had before his admission to membership, because his ideas become broader; because he knows what organized medicine stands for; because he has lofty purposes that were once perhaps narrow and contracted; because he has imbibed the spirit of progress; because he has received encouragement from the very class who should take him by the hand when he is down and point him to something better than groveling along in the same old rut.

We were all undergraduates once. Some of us, perhaps, practiced on one, two or three courses. Some of us have not forgotten the kind, encouraging word from the graduate, especially when coming from one who was held in high esteem. Some of us have not forgotten the resolutions made after coming in contact with these men, and how we were

encouraged to push forward and graduate, so that we might be on an equal plane. As the matter stands there seems to be a dividing line. This dividing line separates the class that is elevated from ones that are not so elevated. Shall we reach down a helping hand to these fellows in their efforts to get upon the plane that we stand upon, or shall we like the Pharisee, stand erect, proclaim that we give tithes of all we possess, and thank God that we are not as other people?

The final analysis is this: Very few of us refuse to consult with the undergraduate when called. To be sure none of us refuse the proffered consultation fee when offered. Then, where is the difference in meeting these people and consulting with them at the bedside, and meeting with them and consulting with them in the county society? The only difference is that one is a paid transaction and the other is an item of generosity and love coupled with that degree of charity that should extend to all men. We should not forget that golden rule, "Do unto others, as you would have others do unto you." To be sure most of us would have liked to be members of a county society when we were undergraduates and in every way eligible to membership, had an opportunity been offered.

C. C. STEPHENSON, M. D.,

President, Arkansas Medical Society.

District and County Societies

THE SEBASTIAN COUNTY MEDICAL SOCIETY met at Fort Smith, Tuesday the 10th, and elected the following officers: Dr. H. Moulton, President; Dr. J. G. Omelvina, Vice-President; Dr. C. S. Holt, Secretary, and Dr. J. A. Foltz, Treasurer. At the next meeting in January a number of physicians from near-by towns will be invited to be present and the regular session will be followed by a banquet.

THE WHITE-CLEBURNE COUNTY MEDICAL SOCIETY will meet at Searcy, Thursday, January 2, 1908, at 10 o'clock a. m. All physicians in White and Cleburne counties are cordially

invited to be present and participate in the meeting. The following is the program:

Diphtheria. By J. B. Grammer, M. D.
 Puerperal Eclampsia. By W. H. Bruce, M. D.
 Pneumonia. By W. J. Miller, M. D.
 LaGrippe. By J. L. Jones, M. D.
 Scarlet Fever. By R. T. Nowland, M. D.
 Report of Cases. By C. B. Stark, M. D.
 Report of a Case of Difficult Labor. By W. H. L. Woodyard, M. D.

THE PHILLIPS COUNTY MEDICAL SOCIETY at the last regular meeting held at Helena, December 3, elected the following officers for the ensuing year: President, Dr. M. Fink, Helena; Vice-President, Dr. J. W. Bean, Marvell; Secretary-Treasurer, Dr. W. C. King, Helena; Censor, Dr. C. H. Trotter. Dr. J. W. Bean, the essayist for this meeting, read a paper on "Puerperal Eclampsia." After giving the etiology, symptoms, etc., he gave the history of a number of cases he had met with, and gave in detail the treatment and final result in each case. Dr. A. A. Hornor led the discussion in which all of the members present participated. The attendance was quite good at this meeting, and an attractive program has been arranged for the next meeting, which will be held January 7, '08.

THE PULASKI COUNTY MEDICAL SOCIETY met in regular session at the School Board Rooms at 8 p. m. with the following present: President, A. Watkins; Vice-President, Jno. R. Dibrell; Secretary, M. D. Ogden; Treasurer, S. U. King. Drs. Bathurst, Bauduy, E. Bentley, C. E. Bentley, Cantrell, Christian, Cunningham, Davis, E. R. Dibrell, Dunaway, Flinn, E. E. Hodges, Judd, Kinsworthy, Kirby, Lenow, McClain, Meriwether, Miller, Prothro, Shinault, Snodgrass, Stephenson, Stover, Sweatland, Vaughan, Vaughter, J. G. Watkins, Wayne, Witt and Zell. The minutes of the last regular meeting were read and approved.

Dr. R. B. Christian read a paper on "The Importance of Sanitation in the Treatment of Injuries."

Dr. Cantrell spoke of the importance of sanitation in medical as well as in surgical cases, and referred to the "laudable pus" of former times.

Dr. Kinsworthy inquired as to the value of Balsam Peru poured into fresh wounds as it was supposed to prevent the entrance of germs into the tissues.

Dr. Vaughan reported a lacerated hand which healed after applications of hot glue.

Dr. E. Bentley complimented the essayist and reviewed some old time methods. He spoke of the use of Balsam Peru in indolent ulcers as a stimulant to healing.

Dr. Sweatland advocated "internal cleanliness" and thorough preparation for operation. He uses stearate of zinc and Balsam Peru as a dressing powder.

Dr. Stephenson spoke of alcohol lowering resistance to infection and reported a stab wound of the eye which was infected after enucleation.

Dr. Christian closed the discussion.

The next order of business was the report of the Secretary.

SECRETARY'S REPORT.

Mr. President and Members of the Pulaski County Medical Society:

I beg to submit the following report as secretary of this society for the year ending Dec. 2, 1907:

MEMBERSHIP.

New members received by initiation, (Keating Bauduy, A. M. Zell, J. R. Wayne) 3.

New members received by transfer (Wm. R. Bathurst, C. P. Meriwether, D. C. Walt, H. H. Kirby) 4.

Total new members 7.

Lost account non-payment of dues (W. E. Bailey, E. C. Thorne, J. W. Jenkins, Ollie Oberholzer,) 4.

Lost account transfer (J. A. Simmons), 1.

Total members lost, 5.

We have had no deaths.

We have two honorary members (C. Watkins and Wm. Thompson). Total active members, 67.

MEETINGS HELD.

Regular, 18; Call, 2; total 20.

FINANCES.

Balance on hand Dec. 2, 1906.....	\$ 1.75
Dues of 67 members at \$5.00.....	335.00
Initiation fees, 3 at \$5.00.....	15.00
Special assessment of May 27, 1907	
42 at \$3.....	126.00
Total	\$477.75
Less 1907 dues paid in 1906.....	17.00
	<u>\$460.75</u>

Orders on Treasurer 459.50

Balance on hand Dec. 2, 1907.....\$ 1.25

Twenty-two members have not paid the special assessment.

Thanking the members of this society for their uniform courtesy to me during my incumbency, I am,

Very respectfully,

M. D. Ogden.

The next order of business was the election of a President. The following nominations were made: Jno. R. Dibrell, M. D. Ogden, R. W. Lindsey, C. R. Shinault, C. E. Witt, A. E. Sweatland, Milton Vaughan and O. K. Judd. A final ballot resulted in the election of Jno. R. Dibrell.

Nominations for Vice-President were then made as follows: Drs. O. K. Judd, J. H. Lenow, A. E. Sweatland, E. N. Davis, S. P. Vaughter, M. D. Ogden, J. P. Runyan, R. W. Lindsey and C. P. Meriwether. On final ballot Dr. O. K. Judd was declared elected.

Nominations for Secretary were made as follows: Drs. J. G. Watkins, J. R. Wayne, Wm. R. Bathurst, A. M. Zell, Milton Vaughan, M. D. Ogden, A. R. Stover. On final ballot Dr. Jno. G. Watkins was declared elected.

Nominations for treasurer were made as follows: S. U. King, F. L. French, Milton Vaughan, E. R. Dibrell, M. D. Ogden. On ballot Dr. S. U. King was declared elected.

Nominations for member of the Board of Censors to fill the place of Dr. R. B. Christian, whose term had expired, were made as follows: Drs. R. B. Christian, J. H. Lenow, E. R. Dibrell. On ballot Dr. R. B. Christian was re-elected for three years.

There being no further business the society adjourned.

THE FAULKNER COUNTY MEDICAL SOCIETY met in regular session December 19. The following papers were read:

"The Treatment of Post-Partum Hemorrhage." By Dr. J. S. Westerfield.

"Is Quinine a Specific in Malaria?" By Dr. J. F. Brown.

"A Review of the Newer Remedies." By Dr. Geo. S. Brown.

Dr. Geo. S. Brown was elected President; Dr. Geo. L. Henderson, Vice-President; Dr. I. N. McCollum, Secretary; Dr. J. B. Munn, Delegate to the State Society; Dr. W. R. Grieson, Alternate.

THE FRANKLIN COUNTY MEDICAL SOCIETY held its regular meeting November 5th. Only five members attended, however, we had an interesting and profitable meeting.

A committee was appointed to look after traveling "doctors" who appear occasionally and practice without license. One of the members, Dr. Blackburn, being a member of the town council, promised to ask the aid of that body.

THE OUACHITA COUNTY MEDICAL SOCIETY has adopted the Post-graduate Course of Study arranged for the use of county societies, by Dr. Blackburn, of Kentucky.

THE POPE COUNTY MEDICAL SOCIETY has held its regular quarterly meetings for this year, with the exception of the September meeting. The next meeting will be held on the third Thursday in December. As there are only nine members composing the society, it is highly important that each member endeavor to be in attendance.

THE JOHNSON COUNTY MEDICAL SOCIETY met November 4, with a very good attendance. Clinical cases were reported by Drs. J. L. Stewart and E. C. Hunt.

Dr. J. F. Smith, read a paper on "Acute Osteomyelitis," which elicited interesting and profitable discussion.

Dr. J. L. Stewart will read a paper for the December meeting on "La Grippe and Its Sequellae."

Dr. David Norvell, of Hagarville, has moved to Spokane, Wash.

Dr. C. E. Robinson, after spending two months here attending to business affairs, has returned to his home in Berkeley, Cal.

THE YELL COUNTY MEDICAL SOCIETY met at Dardanelle December 10.

Officers elected as follows: Dr. M. A. Worsham, President, (re-elected); Dr. J. R. Linzy, Vice-President; Dr. A. H. McKenzie, Secretary-Treasurer, (re-elected.)

Dr. J. R. Linzy read a very interesting paper on "Hydrotherapy."

Dr. H. L. Montgomery, of Gravelley, with his brother, Dr. John Montgomery, of Briggsville, visited their brother at Atkins, last week.

The society will meet in February at Ola.

Dr. M. L. Kirkcey, of Chickalah, has moved to Texas.

THE DREW COUNTY MEDICAL SOCIETY held its regular quarterly meeting at Monticello, Tuesday evening, December 10.

The society was royally entertained at the home of Dr. and Mrs. A. S. J. Collins. At the conclusion of the social program the business meeting was held, at which the following officers were elected for the ensuing year: President, Dr. A. S. J. Collins; Vice-President, Dr. R. N. Smith; Secretary-Treasurer, Dr. E. R. Cotham; Censor, Dr. W. A. Brown.

THE SEVIER COUNTY MEDICAL SOCIETY met at Lockesburg, December 10, 1907, with a small attendance, there being only eight members present. All the doctors on the program for papers, were absent. The "quiz," conducted by Dr. E. W. Hopson, was very interesting. The questions asked and discussed were as follows:

1. Describe Emmett's operation for repair of perineum.
2. Locate and describe Bartholin's glands.
3. Give prognosis and treatment of fracture of neck of femur.
4. Give rule for proportioning adult dose for children.
5. Name indications for the use of obstetrical forceps.
6. Give differential diagnosis of acute alcoholism and apoplexy.
7. Give symptoms and treatment of sciatica.
8. Name the fluids of the body that are intended for its nutrition.

9. Give prognosis as to life of child and mother in placenta previa centralis and treatment.

10. Name the branches of the ophthalmic nerve.

The following officers were elected: President, Dr. R. F. Johnson; Vice-President, Dr. F. L. Rison; Secretary, Dr. R. L. Hopkins.

The membership of the society has increased from thirteen to twenty-three, and the prospects are good for every eligible doctor in the county to become alligned with organized medicine before the close of 1908.

News Items

Dr. Geo. S. Brown, of Conway, was a recent visitor to Little Rock.

Drs. Vinsonhaler and Watkins have moved their offices to the Mann Building, on East Fifth street.

The Fayetteville Sanitarium, Fayetteville, Arkansas, is now open for the admission of patients. Dr. G. B. Replogle is the Superintendent.

Dr. Jas. H. Lenow, Dean of the University of Arkansas, Medical Department, attended the meeting of the Southern Association of Medical Colleges at New Orleans.

General News

BARNES MEDICAL AND HIPPOCRATEAN COLLEGES DISCREDITED.

The Barnes Medical College, having failed to equip its laboratories with proper apparatus for the teaching of medicine, in accordance with the requirements of the Board, was not placed upon the list of accredited medical colleges of the State thus barring its students from examinations before the Board for licenses to practice in the State. The Hippocratean College of Medicine, of St. Louis, was also discredited for similar reasons. The latter is the recently inaugurated night school for medical students.—Journal Missouri State Medical Association.

THE HOMEOPATHIC AND ECLECTIC BOARD OF MEDICAL EXAMINERS will met in Little Rock, January 14, 1908 for the examinations of applicants. Dr. V. H. Hallam, Hot Springs, and Dr. A. J. Widener, Little Rock, are the secretaries of the respective Boards.

AT THE TRI-STATE MEDICAL ASSOCIATION (Mississippi-Arkansas-Tennessee) which met in Memphis on November 19-21, 1907, the following officers were elected: President, Dr. E. J. Johnson, Yazoo City, Miss.; Vice-Presidents, Dr. R. E. Howard, Durand, Miss.; Dr. C. M. Lutterloh, Jonesboro, Ark. and Dr. Herman Hawkins, Jackson, Tenn.; Secretary, Dr. Richmond McKinney, Memphis, Tenn.; Treasurer, Dr. M. Haase, Memphis, Tenn. The next meeting will be held at Memphis.

New Members of the American Medical Association for Arkansas

New members of the American Medical Association for Arkansas: Baxter, G. S., Casa; Bradford, W. S. Haynes; Cothorn, Thad Walcott; Hardin, Nina V., Fayetteville; Spencer, S. J., White; Woodul, T. W., Pine Bluff; Davis, R. G., Hot Springs.

Change of Addresses

Dr. O. A. Jamison, of Elgin, to Tuckerman, Ark.

Dr. I. Edrington, of Griffithville, to Boxelder, Texas.

Civil Service Examination

PHYSICIAN (Male).

Indian Service.

January 15, 1908.

The United States Civil Service Commission announces an examination on January 15, 1908, at the places mentioned in the list printed here-

on, to secure eligibles from which to make certification to fill vacancies as they may occur in the position of physician (male) in the Indian Service, at salaries ranging from \$720 to \$1,200 per annum.

The examination will consist of the subjects mentioned below, weighted as indicated:

Subjects and Weights:

1. Letter-writing (the subject-matter on a topic relative to the practice of medicine), 5.
2. Anatomy and physiology (general questions on anatomy and physiology, and histologic or minute anatomy), 10.
3. Chemistry, materia medica, and therapeutics (elementary questions in inorganic and organic chemistry; the physiologic action and therapeutic uses and doses of drugs), 15.
4. Surgery and surgical pathology (general surgery, surgical diagnosis; the pathology of surgical diseases), 20.
5. General pathology and practice (the symptomology, etiology, diagnosis, pathology, and treatment of disease), 25.
6. Bacteriology and hygiene (bacteriologic methods, especially those relating to diagnosis; the application of hygienic methods of prophylaxis and treatment), 10.
7. Obstetrics and gynecology (the general practice of obstetrics; diseases of women, their pathology, diagnosis, symptoms, and treatment, medical and surgical), 15; total, 100.

Seven hours will be allowed for this examination.

Age limit, 25 to 55 years on the date of the examination.

Men only will be admitted to this examination.

This examination is open to all citizens of the United States who comply with the requirements.

This announcement contains all information which is communicated to applicants regarding the scope of the examination, the vacancy or vacancies to be filled, and the qualifications required.

Applicants should at once apply either to the United States Civil Service Commission, Washington, D. C., or to the secretary of the board of examiners at any place mentioned in the list printed hereon, for application Form 1312. No application will be accepted unless properly executed and filed with the Commission at Washington. In applying for this examination the exact title as given at the head of this announcement should be used in the application.

As examination papers are shipped direct from the Commission to the places of examination, it is necessary that applications be received in ample time to arrange for the examination desired at the place indicated by the applicant. The Commission will therefore arrange to examine any applicant whose application is received in time to permit the shipment of the necessary papers.

Examination may be had at Little Rock, Fort Smith and Texarkana.

INFORMATION DESIRED CONCERNING CARCINOMAS OF THE MAMMARY GLAND.

The writer desires information regarding any alleged recoveries or cures of inoperable or recurrent carcinoma of the mammary gland.

If any case or cases are known to anyone who reads this, and can be authenticated by facts as to the history and condition prior to recovery and the length of time which has elapsed since recovery, such information will be much appreciated and duly acknowledged.

Any well-authenticated reports of recoveries from carcinoma located in other parts than the mammary gland, will be welcomed.

Cancer paste cures, X-ray cures, radium cures, or cures as result of surgical operation, are not wanted.

Hearsay cases are not wanted, unless accompanied by name and address of the person who can give knowledge first hand.

Address: Horace Packard, 470 Commonwealth Ave., Boston, Mass.

Book Reviews

THE DIAGNOSIS AND TREATMENT OF DISEASES OF WOMEN. By Harry Sturgeon Crossen, M.D., Clinical Professor of Gynecology, Washington University; Gynecologist to Washington University Hospital, and Chief of the Gynecological Clinic; Associate Gynecologist, St. Louis Mullanphy Hospital; Consulting Gynecologist to Bethesda Hospital, St. Louis Female Hospital, and St. Louis City Hospital; Formerly Superintendent of the St. Louis Female Hospital; Fellow of the American Association of Obstetricians and Gynecologists; Ex-President of St. Louis Obstetrical and Gynecological Society; Member American Medical Association, Missouri State Medical Association, St. Louis Medical Society, etc. With 700 Illustrations. C. V. Mosby Medical Book and Pub. Co., St. Louis, 1907.

This book by Dr. Crossen is devoted exclusively to the Diagnosis and Treatment of Diseases of Women as met with in the office and bedside by the general practitioner. The differential diagnosis of those conditions necessitating operative treatment, is clearly set forth, also the kind of operation called for by the particular conditions present, what the operation is intended to accomplish, the preparation of the patient, etc. The author truthfully remarks, "that the two principle stumbling blocks encountered in the way of accurate gynecological work are, first, the difficulty of determining exactly the conditions present in the puerperium, and, second, the lack of a clear understanding of the indications governing the selection of the particular treatment best adopted to each disease." These important phases have been given special consideration. The arrangement of the text has not been one of chance, but is designed to show not only the facts of a subject, but also, the mutual relation of the facts and their bearing and relative importance in the diagnosis and treatment. The illustrations are abundant and excellent, and we know of no other similar work that equals its pictorial features. It is to be highly commended from every standpoint, and it should become a popular book. The author is deserving of great praise and credit for the building of such a book.

DISEASES OF THE INTESTINES AND PERITONEUM. By Dr. Herrmann Nothnagel, of Vienna. Edited, with additions, by H. D. Rolleston, M.D., F.R.C.P., Physician to St. George's Hospital, London, England. Second Edition. Octavo of 1059 pages, Illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$5.00 net; Half Morocco, \$6.00 net.

An authorized English translation from the German of the late Prof. Herrmann Nothnagel's work on Diseases of the Intestines and Peritoneum, has been accomplished under the editorial supervision of Prof. Alfred Stengel, of the University of Pennsylvania. Pathology and Therapy have been greatly enriched through the researches and contributions of Nothnagel, and the present volume truthfully reflects the great learning of this master. The book contains more than 1000 pages of which 707 are devoted to consideration of the Diseases of the Intestines and their treatment, the remaining portion to affections of the Peritoneum.

The chapters that are of special interest are those on Intestinal Stenosis and Occlusion, Malignant Neoplasms, Appendicitis and Peritonitis. These subjects are treated of exhaustively and with a completeness that is satisfying to the most critical. The very latest information on the subjects treated of, is found in the abundant editorial notes with which the book abounds. And this feature is by no means an unimportant one. This is a book for the student and should be in the library of every practitioner. It contains a complete bibliography.

THE PRINCIPLES AND PRACTICE OF MODERN SURGERY. By Rosswell Park, M. D., Professor of Surgery in the University of Buffalo, Buffalo, N. Y. In one very handsome imperial octavo volume of 1072 pages, with 722 engravings and 60 full-page plates in colors and monochrome. Cloth, \$7.00, net; leather, \$8.00, net. Lea Brothers & Co., Philadelphia and New York, 1907.

A single volume of ordinary size covering the Principles and Practice of Surgery designed for use by student and practitioner must necessarily be condensed in many places and all absolute and irrelevant matter omitted. But in order to fill the requirements of text and reference, it

should suffer no loss in the omission of details or clearness of statements. Dr. Park's known ability as a writer, his scientific laboratory training and wide experience in surgical practice, render him especially competent to present such a symmetrical work as the present one, the worthy successor of a Treatise on Surgery by American Authors. The whole realm of surgery is admirably covered, and the portions devoted to pathology is especially instructive and interesting. The classification of Cysts and Tumors is highly satisfactory. The illustrations consist of over 700 fine engravings and many full-page plates and assist the reader in more readily grasping the subject of the text.

A MANUAL OF CLINICAL DIAGNOSIS BY MEANS OF MICROSCOPICAL AND CHEMICAL METHODS For Students, Hospital Physicians, and Practitioners. By Charles E. Simon, B.A., M.D., Professor of Clinical Pathology at the Baltimore Medical College, etc. Sixth Edition, Thoroughly Revised. Illustrated with 177 Engravings and 24 Plates in Colors. Philadelphia and New York: Lea Brothers & Co., 1907. Pp. xix-17 to 682.

The sixth edition of this thoroughly standard work contains much material that is new. The entire work has been rewritten, and that which was not clearly practical, has been eliminated. The chapter on the Blood has been brought up to date. A new chapter on the Oponins has been introduced, and includes full details regarding the technical portion of the subject. In view of Dr. Simons' experience as a pioneer worker along this line, it should be of especial interest to American readers.

Two appendices have been added as a guide to the student's work in bacteriology, and for the service of teachers who use the book as a textbook of clinical diagnosis. The first gives full instructions for the preparation of culture media, and the second gives an outline of a course in clinical laboratory methods. The "Course" is based upon the work which Dr. Simon has conducted for post-graduates, and is thoroughly practical and comprehensive. The illustrations are ample and are mostly from the pen of Mrs. Simon.

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Original Articles

STRANGULATED INGUINAL HERNIA.

By L. E. Willis, M. D., Newport.

J. B., male; age 19; occupation farmer; family history negative. Has always had good health, except has had hernia on right side since he was three years old. On March 28, about 6 a. m., he started across the horse lot to catch his horse. and while walking experienced a peculiar pain in his bowels like colic, which increased, and he went to the house and laid down. He soon began vomiting; first his breakfast, then green, bitter material. Dr. G— was called and examined him, found strangulated hernia on right side, and tried reduction by taxis, but without success. The only relief the patient obtained was when he was under the influence of a hypodermic injection of morphine. Next Dr. S— was called in, he and Dr. G— anesthetized patient and tried again to reduce the hernia by taxis, but without success. Patient was now vomiting stercoraceous material, pulse was weak and rapid. I was called about midnight March 29, by Dr. G— and reached patient about 2.30 a. m., March 30th.

Upon examination we found the patient pale and nervous with a peculiar, anxious expression. The surface was cold and bathed in perspiration. Pulse weak and thready; he was vomiting stercoraceous matter and had hiccough. He complained of pain in the right lower quadrant of the abdomen. By palpitation I found slight distention of lower part of abdomen, and right side of scrotum very much enlarged and containing a mass which was of a doughy consistency and felt like bowel. This enlargement extended up through the inguinal canal. By inspection I found discoloration of scrotum and slight ballooning of lower part of abdomen. Diagnosis, strangulated inguinal hernia of right side. I advised operation and the doc-

tors agreed with me; patient and family were anxious for relief by any means that we thought necessary.

We washed out stomach thoroughly, then scrubbed patient and prepared field of operation; we improvised an operating table out of the kitchen table. Right here I want to say to you surgeons who have nice aseptic operating rooms and hospitals with trained nurses to take care of your patients, it is a very different proposition when you operate on a patient on a kitchen table in a room that makes no pretensions to asepsis, and with a coal oil lamp as your only light, and have to depend upon an inexperienced nurse to take care of patient after operation. But you know we are sometimes compelled to make use of the best we can get, and here was a patient that could not be moved to hospital or even to an operating room.

Patient was anesthetized by Dr. S—, Dr. G— and my nurse assisting me in the operation. I made a semi-lunar incision from pubic crest to the right towards the anterior superior spine of ilium through skin, superficial fascia and fat, then by taking up the successive layers with two pairs of forceps, divided each layer until I came down to the hernial sac which I then opened. I could see the bowel which was black, and the serous coat was roughened in some places. I enlarged the constricting ring, liberated the bowel, and applied gauze pads wrung out of hot normal saline solution.

At this time patient's circulation became very poor and I had a very short time to decide what to do next, whether to attempt to resect the apparently necrosed bowel and bring the ends out through the wound to drain and leave them there, or to do an end-to-end anastomosis, or to depend upon re-establishment of the circulation of bowel. After watching the effects of the hot gauze pad for a short time, and seeing some change in the color of the bowel from blue-black to lilac color, and observing slight muscular contraction, I decided to cleanse wound, drop bowel back into abdomen and close up as I would in operation for radical cure of hernia.

*Read in the Section of Surgery, of the Arkansas Medical Society, at the Thirty-First Annual Session, Little Rock, May, 1907.

Patient rallied from anesthetic, complained of some pain, but no nausea. Dr. G— saw him at 5 p. m., and reported him as resting well, his temperature 99, pulse 99. I saw him on March 31st. Found him with temperature of 99 3-5, pulse 82. He said he had no pain. His condition on April 1st was as follows: Pulse 65, temperature normal, resting well. I saw him on April 3rd. Found him cheerful, pulse 58, regular and of good volume, temperature normal. Examined wound for first time since operation, found it dry and healthy, dressed it with sterile gauze covered with absorbent cotton, held in place by oxide of zinc adhesive straps. The only thing patient complained of was hunger.

Saw him again on April 7th. His temperature was normal, pulse 62, which was the highest pulse rate he had had for the past four days, his pulse part of the time being as low as 44. Kidneys were acting well; bowels had not been moved since the operation.

Upon inspecting the wound I found it nicely united, not a drop of pus. I took a piece of sterile gauze and brushed off all the knots where my stitches had been tied; put on gauze pad, held snugly in place by a bandage. We ordered him to have drachm doses of saturated solution of magnesium sulphate every two hours until bowels moved. Dr. G— reported to me next day that patient had had two good actions of bowels without any pain or bad indications; temperature normal; pulse 65. We had patient stay in bed for twenty-one days after operation. I examined him May 13th; he has been up doing light work for the past two weeks. He shows no signs of the hernia returning, and does not complain of any discomfort. I am anxious for some one who has had more experience than I have, to tell me why this patient's pulse ran down to 44 on the third day after the operation, and remained slow so long.

DISCUSSION.

Dr. Thibault: Mr. President, the doctor's paper gives a typical description of the closing operation in inguinal hernia. It suggests several things which very often occur in the life of the country practitioner. In the small towns we frequently meet with cases like this that require immediate operation. Every conscientious general practitioner that runs across a case that demands surgery, if it is possible, and if the patient is able to stand it, refers it to one who does more surgery than he does; but to every one comes the necessity of operating on these cases, else, if we wait to refer them to some one more capable, it is too late for the operation to do them any good. Therefore, every physician may expect to face

these cases for which operation is absolutely necessary. He must be a general surgeon if he is a general practitioner. Very often he must take the risk of making a bowel anastomosis. There are half a hundred methods of producing anastomosis. To make an intestinal anastomosis, the surgeon generally adopts one of several mechanical methods—a certain clamp or button. The thing that is most beneficial to the general practitioner is to thoroughly master the Connell suture. He does not need to have any instruments except two common sewing needles and silk suture. I once met with a case like that described by the doctor. I had to do the operation instantaneously. I did not have any clamps or Murphy buttons, or any paraphernalia; and had to do the anastomosis with a Connell suture. It is done absolutely without instruments, except needle and sutures. You can always produce intestinal anastomosis whether or not you have in your grip any clamps or Murphy buttons, or anything else except the simple accessories I have described.

REPORT OF A CASE OF AMPUTATION OF A LEG UNDER LOCAL ANAESTHESIA.

By R. C. Dorr, M. D., Batesville, Ark.

In reporting this case I claim nothing new or original, but to show where there are contra-indications to a general anaesthetic, a limb can be amputated under a local anaesthetic with very little pain or shock to the patient. The solution I use is the following, copied from Ochsner's "Clinical Surgery":

Cocaine Muriate, Gr. I,
Acid Carbolic, M. V.,
Sodium Chlorid, Gr. III,
Aquae Destil., oz. I.

If you wish to use this solution in the skin you must leave out the carbolic acid, as it produces sloughing of the skin.

On March 5th, 1907, I was called by Dr. L—, to see Mr. H. King, of Walnut Grove, Ark. I learned that on Feb. 10, 1907, Mr. King was kicked while getting off a mule, producing a compound fracture of the right leg.

He was very much emaciated, was suffering from general sepsis, with fever and sick stomach, and had albumen in his urine.

The soft tissues over the lower end of the tibia had sloughed off; the ankle-joint and tarsus were infected; the foot and leg much swollen; the fractured ends of the tibia were dead.

*Read in the Section of Surgery, of the Arkansas Medical Society, at the Thirty-First Annual Session, Little Rock, May, 1907.

Owing to the low condition of the patient at the time, I refused to amputate. After establishing better drainage, putting on a moist dressing and recommending a more nutritious diet, I returned home.

On March 18th, I was called back and found some improvement in his general condition. We amputated the leg about the junction of the middle with the lower third, first giving the patient 1-4 gr. morphine, 1-30 gr. strychnine hypodermically, then injecting all the soft tissues with the above solution, except the skin, which we sprayed with ethyl chloride.

Our patient was free of fever in about ten days, and made an uninterrupted recovery.

DISCUSSION.

Dr. Canfield: I don't wish to discuss the paper, but to ask Dr. Dorr in closing the discussion to be a little more explicit, if he will, as to the exact method of introducing the anaesthetic. I want to know particularly if he tried to single out the nerve trunks and anaesthetize them separately.

Dr. Thibault. There has been a great deal of experimenting done with various salts and local anaesthetics. I think it is the duty of every surgeon to make some experiments himself. But, with what we all know and what has already been worked out, a man will be surprised at the facility with which he can do any minor operation, or with which he can do an operation bordering on the major, with local anaesthetics, and how little of it he can use, if properly administered. I have been disappointed in ethyl chloride and other freezing mixtures. After the operation is over, and after the tissue thaws out, there is more pain than from the operation. It is like chilblains or frost-bitten heels. It is not always the case, but where the skin is hard, as on the soles of the feet or the palm of the hand, it nearly always occurs that if you freeze it and then incise, the patient has more pain after the operation than if you simply made an incision without freezing the tissues.

Dr. Barlow: I think the most important point in local anaesthesia is the small amount of cocaine used. I have amputated two tibias, three or four femurs and one arm under local anaesthesia. You can do just as much with a small as a large amount. I think 1-8 of a one per cent solution, after you go through the skin is sufficient, and you have no sloughing or stitch abscesses or anything of that kind following. I saw Dr. Bodine treat thirty-five herniotomies under cocaine, and he first used, I think, as low as 1-16 of a one per cent solution. In any amputation, you have to cocaineize the nerves, that is, to find the different

nerves and cocaineize them by slipping the point of the needle under the sheath of the nerve and inject the solution.

Dr. Cox: I rise to compliment Dr. Door. It was to the point. He teaches one thing above others, and that is that we can use local anaesthesia. If you apply it to the nerve trunk, you can accomplish more.

Dr. Brown: I appreciate very much what has been said on cocaine anaesthesia. I have done quite a good many operations with it myself, but I fear that we pay too little attention to it.

I remember not many years ago a man came into my office with a foreign body in his eye. I put in about four or five drops of a four per cent solution to remove this body. I will say that we had a bad time with the man for about three or four hours. I thought he would die. He was very delirious, his heart action very irregular, and his pulse very weak, but, however, he came out of it all right.

I wish at this particular time to mention a case which occurred recently with one of the most eminent surgeons in the United States, whose name I refrain from calling. Perhaps some of you know him already, or will later. A man came to his office to have a very trifling operation performed. It was so simple an operation that he did not think it necessary to take the patient to the hospital. He injected a few drops of a four per cent solution of cocaine. In a few minutes his patient was dead. It was evidently the cocaine that killed him. As I said before, I have done many operations with cocaine, and have had but very little bad effects. But we must think of the serious effects that may follow its use.

Dr. Dorr: There is quite a difference between a four per cent and a 1-16 of a one per cent solution. A four per cent solution is entirely too strong, and would be dangerous to use. I don't think there is any danger, because the minute you begin to operate, it begins to drain at once. The trouble is, it will drain out too quickly before you get through. Dr. Brown said he used a four per cent solution. I used one grain to one ounce. That would be about 1-16 of one per cent. I don't think there is any danger at all in using as many syringes as you like on the limb where you have it ligated.

The technique in this case could be improved on. What I did was simply to take the needle and inject all the way around, deep in the tissues, infiltrating them, and spraying the skin with ethyl chloride, because I had not thoroughly anesthetized it. I presume I could have taken a different solution and used the method of injecting the skin itself. Neither did I take up each and every nerve and anesthetize them. I had one assistant. Our patient suffered some, but it was bearable. He

had very little shock from it, and if I was going to do it again I would have a longer needle and inject more than I did this time. I did not infiltrate, by the way, all the tissues. When I got to the periosteum, I took a piece of cotton, wet with the solution, and kept it in contact for awhile before cutting. But the worst pain your patient will suffer, as a rule, is after picking up the vessels, because at that time the anaesthesia has gone. That's where you get in your worst trouble, and as I did in this case. The man had some pain, but there was no shock to the patient. He came out just as well as when he went in.

Dr. Young: Didn't he suffer when you put the sutures in?

Dr. Dorr: Yes, a little, but that's perfectly bearable.

A CASE OF EPIBULBAR SARCOMA.

By Frank Vinsonhaler, M. D., Little Rock.

Dr. Ogden, Chairman of the Section on Pathology, requested me to report any interesting case that might come under my observation; and I selected one that I thought was especially interesting, because unusual. I shall present it very briefly.

Patient, white male, age about fifty-five; for two years had been affected with a growth upon the left eye-ball which had gradually increased in size, until the eye became blind and painful; growth originated, according to patient's statement, from a small spot upon the limbus, outer side, a little above a line drawn horizontally across cornea.

Examination revealed a growth about the size of a plum completely covering the cornea but extending also over sclerotic for some distance on outer side of the eye-ball. The color was pale-pink and in appearance resembled epithelioma, rather than a sarcomatous growth.

Patient consented to an enucleation, and the eye-ball was removed with a long section of the optic nerve. No evidence of extension along lymphatic of nerve sheath; no perforation of globe.

The patient remained without evidence of recurrence for two years when recurrence took place along cervical chain and near shoulder blade. These were removed and proved to be sarcomata. Two years later patient died from an obscure internal disease, probably a sarcoma, although

owing to distance of patient's home and fact that no autopsy was performed, the cause of death was not definitely ascertained.

I show you here a section of growth with about one-half cornea present and about one-half sclerotic from limbus backward to entrance optic nerve. The origin of the growth is from the epithelium at margin of cornea from which it has extended in both directions. Bowman's membrane is absent in cornea and the most superficial layers of stroma show infiltration with small round cells and pigment; at no place does the growth threaten to penetrate the eye-ball. The type is small round-cell sarcoma with areas of alveolar structure and of pigmentation.

The peculiar interest attaching to this case is its location, an unusual one for sarcoma. It occurs once in six thousand cases according to Borthen. Sarcoma occurs by preference from the region of the limbus externally, it being twice as common on the temporal as on the nasal side. Cases are on record when occurrence took place in palpebral conjunctiva of upper and lower lid, also from pigmented spots in ocular conjunctiva. Statistics show that this disease occurs in thirty-one per cent of cases about the sixtieth year of life; the next age seems to be about the twentieth.

This form of sarcoma has much less disposition to metastasis than the intraocular melanotic form. When recurrence does take place, however, it may take place as a melanotic or a leuco-sarcoma or vice versa. It by no means shows that a leuco-sarcoma will show as a recurring growth one identical in structure or even that the growth shall be identical throughout, part may be spindle-celled, part round-celled and pigmentation may be present in parts of growth; absent in others.

In my case there was at time of operation no glandular swelling and none subsequent to it until cervical glands became involved, although this growth limited itself to the cornea and adjacent ciliary regions. Heyder, in *Archives fur Augenheilkunds*, XVII Vol., reports an epibulbar sarcoma completely encircling the eye-ball without perforation.

In the early stages of epibulbar sarcoma the diagnosis between this disease and epithelioma may be difficult. Roughly speaking, while there is great similarity in gross appearance, the epithelioma is firmer to the touch and presents more irregularity of surface.

Concerning treatment, Saemisch recommends when the sarcoma is small and confined to the epithelial layers its removal without enucleation, if possible; and advises that the growth always

*Read in the Section on Pathology, of the Arkansas Medical Society, at the Thirty-First Annual Session. Little Rock, May, 1907.

be ligated at its base to prevent disagreeable hemorrhage. When the cornea is deeply involved and the growth large, enucleation is the only procedure.

DISCUSSION.

Dr. Ogden: The author describes the pigmentation of the sarcoma, but I did not hear him mention whether the metastases removed from the shoulder were pigmented or not.

Dr. Vinsonhaler: There was no section made from that. I did not have opportunity to examine it.

Dr. Ogden: I have seen this specimen to which he refers. As he states, the parts show marked pigmentation. I have seen it occur before in melanotic sarcoma, springing especially as it does from the skin pigmentation.

Metastases, which are by preference in the liver, very often undergo sarcomatous pigmentation partially; some completely. Absence of the pigmentation would leave one in doubt as to the location of the primary tumor.

The doctor spoke of sarcoma springing from the epithelial limbus; but I don't know whether he refers to the epithelial tissue, or to the subepithelial tissue. I would like to hear further from the doctor on that.

Dr. Vinsonhaler: Between lower epithelial layer and anterior elastic lamina.

DISCUSSION

PRESENT STATE OF CARDIO-VASCULAR DISEASE.

By Dr. Frank Jones, Memphis.

(Dr. Frank Jones, of Memphis, read a paper with the above title in the Section on Practice, at the last meeting of the Arkansas Medical Society, which was, by common consent, one of the most able and scientific papers presented before that body. The rules of the State Society require the authors of papers to deliver their manuscript to the secretary for publication in the Journal. Dr. Jones requested that he be permitted to retain his paper for revision, with the promise that it would be ready for publication last September. Several efforts have been made to secure the paper for publication, but without avail. Having sufficient reason to believe that the author does not desire it published in the Journal, no further effort will

be made to obtain it, and the members of the society are free to draw their own conclusions as to whether or not Dr. Jones has violated the ordinary rules of propriety which are supposed to exist between guest and host. Therefore, in order to complete the records, the discussion on the paper is here below published.)

Dr. Martin: Dr. Jones has pretty well covered the field of all diseases that we ever heard of, and has blamed all of them on arterio-sclerosis at some time. He left out pregnancy and a few other things, but there weren't many. But there is one disease which I think he left out, and that is insanity. I don't know whether he ever thought much about hereditary insanity or not, but I have never been able to find anywhere an explanation of how insanity is hereditary. You can easily understand how a child may be born with six fingers. You can't understand how it happens, but you understand that there are six fingers running along from one generation to another. You can understand how one family will have a peculiarity in the lobe of the ear that does not grow to the face, and another has a peculiarity that does grow to the face. You can comprehend those things. You can understand a child born with a deformed brain has hereditary insanity, and also congenital imbecility. It is hard to understand how a man can be born healthy intellectually, and live forty or fifty years of an active life with a perfect working brain, and then suddenly go crazy without any reason at all except that his father did that, and his grand-father did that.

What peculiarity is there in his brain which is suddenly changed? I can think of nothing except the blood question. In certain families you have a very high blood pressure, and these families are noted for the number of cases of apoplexy and such things that occur. So, I think hereditary insanity is very often the result of this cardiovascular disease that Dr. Jones has tried to lay the rest of the diseases on earth to.

Recently I had a case come to me which illustrates this very distinctly. At least, it seemed so to me. This man was brought to me by Dr. Carmack. He was as near having a "brain-storm" as any man I ever saw. He had to be kept under the influence of drugs most of the time. He gave a history of his father having acute mania at about his age, and died in a month. His father's two brothers had acute mania, one living a month and the other five months. And one of his brothers had had acute mania. This man was a man of such fine brain power that nearly everybody in his county owed him money. In fact, he was the leading business man and banker of that community. Of course, he led a

very active life, but, at the same time, this heredity was back of him. The only thing about that man peculiar that I could find was when I tested his blood pressure it was 220, fully 90 above the normal. I concluded that he had reached an age where his arterial pressure had become so great that it was about to force a "brain-storm," as we call it now, and he would probably die of acute mania in a short time. I told Dr. Carmack that I had found from experiment and at the tub-side that the baths at Hot Springs reduced the blood pressure during the day 20 to 30 mm. We put him in the tub at 98° F. and at the end of fourteen minutes his temperature was 101. When it went to 101, I took the blood pressure, and it had dropped 50 mm., or dropped to 170. After the third bath, he was able to sleep without drugs, and after the fifth bath I found a net loss in blood pressure of 30 mm. He was forced to go home on business, but is going to try to return for these baths. It is nothing new to take baths for high blood pressure. It is done all over the world. But I don't think any bath reduces the blood pressure as much as the baths at Hot Springs. That, I believe, is the only thing that Dr. Jones omitted in the category of diseases.

Dr. Sweatland: I was very much interested in the paper, especially his remarks with reference to the beginning of arterio-sclerosis probably being in the splanchnic area. The cases of arterio-sclerosis, it seems to me, may be summed up in the one word, "retention." Probably there will be 50 per cent. of the patients that come into our office that are suffering from retained toxins, or poisons from decomposition or mal-assimilation. In a certain per cent. of those you will find the beginning of arterio-sclerosis is present. I find that in the treatment of these cases a great benefit is derived from the use of veratrum for the lowering of the blood pressure. It is a great boon to a heart that is overburdened, or a heart that is diseased, taking into consideration its depressing effect if pushed to too great an extent. I would not give anything but that which is active and that which is in the molecular form. That would be the veratrum itself. I am not preaching alkaloids any more than it is sure and safe, but you can have absolute control of it in giving it in this minute dosage. You get rid of this hardness of pulse.

I believe Dr. Jones omitted the skin when he spoke of elimination through the kidneys, bowels, etc. He forgot to mention the skin. I think the skin is the greatest eliminative organ of the body. If the dermal glands are stimulated to activity, which they can be, we get greater elimination than we do through the kidneys. If the arteries of the kidneys are sclerosed, we have kidneys that we don't want to force, and I find

in all my cases that diuretics are not, as a rule, very good to give. The skin will eliminate at all times if properly stimulated, and we get greater elimination through the skin than through the kidneys with sclerosed vessels. I think that was the principal point that the doctor left out. I was very much pleased to have him mention that the beginning of arterio-sclerosis was probably in the splanchnic area.

Dr. Lindsey: Regarding the cause of arterio-sclerosis, you take strains of the heart. That has caused it more, to my idea, than any other. There are other complications that may produce it. I remember being in New York, and noticing longshoremen loading ships, and I asked the doctor about it. He said that every man you examine has an enlarged heart. You take teamsters and such men, and you will find their hearts will be enlarged, and after a while they will have arterio-sclerosis.

You may take any disease of the kidneys or the skin, where you have uremia, the skin is the great eliminator. I believe the doctor missed that entirely.

Regarding the baths, baths of all kinds will reduce the pressure, no matter if you take a hot bath at home. You get the skin at the same time acting when you get a reduction of the blood pressure. That, to my idea, will do as well as the baths at Hot Springs or any other place.

Dr. Jones: It is possible that my friend Martin may have been laboring under a misapprehension as to my assigning to cardio-vascular disease, everything. He said I tried to establish the fact. I know sometimes we try to do a great many things. But I believe we can come more nearly proving absolutely without any pathological conjuring, that a great many of the conditions that I enumerated in my paper were the result of this condition. I assert that if Dr. Turck was called on, and were asked something about gastric ulcer and gastric atony, he would tell you that there is marked sclerosis of the blood vessels, and if he examined those gastric arteries, he would find marked sclerosis.

With reference to the point brought out by the two gentlemen who just preceded me, I said in the beginning that it was the sum total of universal strain; evidence of arterial and visceral insufficiency. I said further that it was a toxemia independent of any other infectious process that might have gone ahead. The strain most assuredly is the most dominant factor in arterio-sclerosis. It is no respecter of persons. It is no respecter of climes. You will find it in the brown-stone front of the millionaire, and you will find it in the hovel of the poor. You will find it with those who have syphilis and those who

have not. You will find it among those who have had too much strain from business affairs; it matters not what their ideas may have been as to living, they will show evidences of arterio-sclerosis. You will find them running hand in hand, and where there has been this strain, there has been also errors of diet. They are eating, not to the degree of sufficiency, but satisfied themselves to the supurative degree of enough. You have toxemia resulting.

I am glad to hear Dr. Turck bring it out in his talk with reference to paying more attention to the muscularity of the stomach. Look after the peristalsis, after the stomach muscles and the food you give, and the secretions will come around all right.

I wish to say in response to Dr. Martin also, that I believe that arterio-sclerosis exists much more frequently than it is supposed to. I am prepared to say that in my hospital and clinic practice that seventy per cent. of the cases that I see above forty years old have pronounced arterio-sclerosis. I might say this in further answer to the doctor's question that if any young student should come to me and say, "I want to study medicine, and study therapeutics, and want to be proficient in them, what must I do?" I would say, "If you want to know the whole field of pathology from A to Z and from Z back to A, take two diseases." "What are they?" "Arterio-sclerosis and mitral insufficiency."

Dr. Turck: I would like to clear myself a little bit, inasmuch as the chairman has permitted me. I did not expect to be heard again today, but I wish to present correctly before you, the position that I wish to be placed in on this point. I simply alluded to certain arterial changes that took place, but did not wish to go into it, as I knew the able work of my colleague, Dr. Jones, has done, would cover it fully. We do not know very much about arterio-sclerosis. Of course, personal opinions are not of much value. We can only obtain our results from experimental work. Inasmuch as all the clinical work done so far has not given us a true knowledge of what it is, therefore, it is necessary to go into experimental research, and the work has been done. It is very interesting.

The muscle wall of the arteries undergoes autolysis. It is a breaking-down that takes place. Some conditions occur in the blood in which self-degeneration takes place in these muscle walls. In the animal, when we feed them extractives of meat, with the colon bacillus present, we find autolysis takes place. The blood serum loses its protective power. Some individuals have more protection than

others. The serum in one man is less protective than in another. This process of autolysis takes place constantly normally. We are always breaking down normally. But, to prevent self-degeneration, we have in the serum these antibodies, this protective agency, these defenses, and, when they are broken down by any means, self-degeneration takes place. Naturally, the arteries that are constantly upon a strain will show this effect. I think, as Dr. Jones stated, that the earliest stage is in the splanchnic arteries, and some of the gastric arteries, and then afterwards the aorta.

What we treat in arterio-sclerosis is simply the result of disease, and not the disease itself. When we lower the blood pressure we simply take away from the individual the very protective power that he has. The blood pressure is simply Nature's means of correcting any disturbance, and there ought to be, therefore, on the part of the physician a little more caution about too rapidly lowering the blood pressure.

Baths are very beneficial auxiliaries in elimination and stimulating the circulation. In the baths at the Springs there may be some agencies that I do not know anything about.

Lastly, I want to impress upon you the importance of being cautious about dropping the pressure down too low. We sometimes do harm. But by dietetics, mechanical treatment and hydrotherapy, very much benefit can be obtained. But I want to mention a little caution. We must not be too sure that we have the whole study of arterio-sclerosis mastered. We understand very little, and there is a magnificent field for great research in that one line. There is a great opportunity for some man to distinguish himself for all time in giving us a full knowledge of arterio-sclerosis.

Dr. Jones: I failed in my rejoinder to make reference to the therapeutic measures. The title of the paper has nothing to do with that. It is too broad a question for me to touch upon the therapeutic measures. For that reason I left it out entirely. It would take a distinct paper to cover the ground of the therapeutic features of that disease, but, in brief words, I will say that the therapeutics in all cardio-vascular diseases, consists in self-control. Don't keep too much company with Bacchus, or see Venus too often, but keep company with Ajax, live close to Nature, keep your bowels open and your conscience clear. That is the best cure for arterio-sclerosis. (Laughter and applause).

CLINICAL EXPERIENCE WITH GONOCOCCUS VACCINE.*

By Anderson Watkins, M. D., Little Rock.

Believing that this Society would be interested in hearing an unbiased report upon the results obtained by the use of a bacterial vaccine in a small series of cases, I have chosen the above subject. There are certain discoveries in medicine which may well be classed as epochs, effecting a revolution in the ideas and methods of clinicians. Some of these events lead to an immediate therapeutic application. Some are of value in bringing about a revision of our conception of certain diseases. The promise of some is fulfilled; others are buried in a scrap-heap of failures resulting from fallacious and ill-timed therapy. It is to be hoped that the scientific value of the discovery of opsonins will not share this fate.

A word as to opsonins. The profession owes to Wright and Douglas the discovery of these antibodies. An opsonin may be defined as a substance in normal or immune serum which, by combining with bacteria renders the latter susceptible to destruction by phagocytes. The word "opsono" means "I prepare food for." This opsonic action is not limited to bacteria, as there are hemopsonins which render foreign red blood cells subject to phagocytosis. So far as determined, opsonins are not identical with precipitins, lysins, agglutinins, anti-toxins and bacteria-trophic substances. Investigation also points to the fact that some opsonins are specific and some partially so.

Wright and Douglas, and others, discovered that persons having a localized bacterial infection present varying amounts of opsonin, specific for the infecting organism. So far as developed, the opsonic index for a specific bacterium is normal or above,

- 1st. In normal sera.
- 2nd. In persons who are successfully resisting a local infection.
- 3rd. In persons suffering from a local infection which liberates small amounts of bacterial toxins, stimulating production of opsonin.
- 4th. In persons, the subjects of artificial inoculations of a dead bacterial culture, i. e., bacterial toxins, in whom there results the production of immune opsonins.
- 5th. In persons who have recently-healed bacterial infections.

The opsonic index is low,

- 1st. In persons who have a local infection, tissue conditions being such as to prevent the entrance of bacterial toxins into the circulation.

2nd. In the subjects of a recent virulent infection, the liberation of toxins being so great as to exhaust the responsive production of opsonins, or the opsonic index in such cases may be fluctuating.

3rd. Specific opsonins are diminished in various diatheses. Roughly, the opsonic index of a serum for a specific bacterium is obtained as follows: The number of the bacteria engulfed by any number of normal leucocytes plus the serum in question, is divided by the number of the same bacteria destroyed by any number of leucocytes plus normal serum. Thus, if the former be 300 and the latter 400, the opsonic index is 0.75.

The discovery that injections of staphylococci produced a fall (negative phase) followed by a rise (positive phase) greater than the fall in the index, led to the hope that here was a means of successfully combatting bacterial infections. Many astonishing results are reported in tubercular, staphylococcic, gonococcic and meningococcic infections by Wright and Douglas, Hollister, Von Eberts and Hill and others. Truedau had been using tuberculin in selected cases for years before Wright's discovery. Later, however, we find that results are not so uniformly successful. It is known that patients often recover of themselves from these infections. Then again, the accuracy of the present opsonic technique has been called into question by such men as Potter, Difman, and Bradley, Scharer and Thomas. According to what we can gather from the literature and from the limited attempts of the writer to obtain the index, the present method is not sufficiently accurate, is not of itself a reliable guide and is too long and tedious a process for the general practitioner. In seven trials I only secured two fair readings, devoting from two to four hours on each attempt. I believe that the clinical symptoms are at least as accurate a guide to the treatment as the index.

It seems that the best results are obtained from inoculations of autogenous vaccines, with the exception of gonorrhoea, in which Von Eberts and Hill report remarkable results from stock vaccine. If stock vaccines be not efficient, then the treatment is at present beyond the reach of the practitioner. The glowing reports of the men just named upon the successful results arising from the use of stock gonococcus vaccines in urethral and arthritic lesions, induced me to try the method upon a few cases at my command. It is needless to say, the treatment was not regulated by the index but by clinical signs with varied dosage and spacing. Where deemed necessary, other recognized treatment was carried out.

Case No. 1.—Chronic posterior urethritis; acute urethritis. A white male, aged 42. Denied syphilis. Gonorrhoea 15 years ago with strictures result-

*Read before the Pajaski County Medical Society.

ing. Present acute attack three weeks old. Profuse discharge containing gonococci. Excessive pain, etc. Anterior irrigation with normal saline, very little improvement.

Aug. 3rd, 1907.—Gonococcus vaccine, 10,000,000 bacteria. Protargol irrigations and methylene blue.

Aug. 5th, 1907.—Marked improvement.

Aug. 8th, 1907.—Gonococcus vaccine, 10,000,000.

Aug. 31st, 1907.—Irrigations and methylene blue discontinued. Dilated strictures to 22 degrees F. Hot astringent injections, deep urethra. Patient irregular in attendance.

Sept. 3rd, 1907.—Dilated to 26 degrees F. Gonococcus vaccine 10,000,000.

Sept. 10th, 1907.—Dilatations produce fever and pain; discontinued. Vaccine, 10,000,000.

Sept. 16th, 1907.—Pain has ceased. Discharge slight. Vaccine, 7,000,000. I did not see this patient any more until Nov. 1st. He said all symptoms had ceased, but knowing his aversion to further treatment I doubt his recovery.

Case No. 2.—Subacute anterior and posterior urethritis probably upon a chronic case. White male, age 54. History of previous attacks. Present case four weeks. Painful micturition, occasional blood clots.

Examination per rectum revealed a swollen tender prostate. Discharge from posterior urethra contains gonococci. Stricture in prostatic urethra caliber No. 20, F. The patient received the usual irrigations, applications, etc., also rectal suppositories. The stricture was gradually dilated to 28 degrees F.

Aug. 31st.—Vaccine, 5,000,000.

Sept. 4th.—Pain and discharge worse; vaccine, 10,000,000.

Sept. 11th.—Mild epididymitis; some discharge.

The patient received local treatment but no more vaccine. About ten days later he left the city, improved, but far from well.

Case No. 3.—Chronic anterior and posterior urethritis in existence two years. The discharge is now thin and scanty, containing a few shreds and gonococci. Meatotomy was indicated and performed. There were three large caliber strictures, two in penile and one in membranous urethra. These were dilated to 30 F. A steady treatment, irrigations, applications, etc., was maintained for three months. The discharge was reduced to a morning gleet but remained at that stage.

Aug. 3rd.—Vaccine, 10,000,000.

Aug 5th.—Improvement.

Aug. 6th to 8th.—No discharge.

Aug. 9th to 27th. Local treatment caused no improvement. Patient left town.

Nov. 13th.—Patient returned; still has gleet. Vaccine, 5,000,000; prostatic massage.

Nov. 22d.—Vaccine, 5,000,000; prostatic massage.

Dec. 1st.—Vaccine, 7,000,000; prostatic massage.

Dec. 15th.—Vaccine, 7,000,000; prostatic massage.

Dec. 18th.—Vaccine, 5,000,000; prostatic massage.

At present date the condition is stationary.

Case No. 4.—Chronic posterior urethritis; acute anterior urethritis. Present attack two weeks old. Profuse gonococci-bearing discharge. During two months of treatment patient underwent the usual local methods. Two strictures admitting filiforms only were dilated to 30 F.

The patient received seven doses of vaccine, 5 to 10 million, at intervals of from 5 to 16 days. There were temporary cessations of discharge followed by return. The patient improved very much, but not, in my judgment, from the vaccine. I doubt his complete recovery.

Case No. 5.—Acute anterior and posterior urethritis, assuming a nearly chronic stage.

A white male, aged 26. Gonorrhoea one year ago apparently cured. Present case five days old. Profuse discharge from anterior urethra showed gonococci. Anterior irrigation. May 26th, patient developed an acute synovitis in right knee; effusion rapid and large. Aspiration, counter-irritation and fixation followed by passive motion. In three and a half months knee was in good condition, when local treatment was resumed. Patient received also four doses of vaccine; the smaller injections caused no improvement; the larger doses were followed by increased discharge.

On Oct. 24th, 16 days after the last dose of 12,000,000, the patient developed pyelitis which placed him in bed for six days and resulted in a pyuria. The pus has since gradually disappeared, leaving a gradually diminishing number of long and short shreds. From the appearance of the pyuria I have never been able to find gonococci. There is some reason to believe that there is no more gonorrhoea, though of this one cannot be positive.

Case No. 6.—Was acute gonorrhoea in a young man. The use of vaccine in this case, even in small dosage, caused so much exacerbation that it was discontinued.

In other acute cases ordinary methods, without the use of vaccine, gave as good or better results than when the virus was used.

Summary. In reviewing the history of these cases one is confronted with the usual impossibility of knowing whether or no there is final cure. This is owing to the lack of knowledge of subsequent history and of what constitutes a cure. We lose sight of the majority of these cases soon after treatment is discontinued.

In case No. 1, an acute inflammation superimposed upon a chronic urethritis, there was some improvement following the use of vaccine, but no more than when it was omitted.

In case No. 2, a subacute and old chronic case, vaccination was followed by increase of acute symptoms.

Case No. 3 was apparently of an ideal type for vaccine treatment, but while apparent improvement at times followed the injection of the virus, no permanent benefit accrued.

In case No. 4, a recent anterior inflammation with a chronic posterior urethritis, no real curative tendency upon the part of vaccine was discoverable.

Cases Nos. 5 and 6, acute cases, were certainly not benefited by vaccine; all acute symptoms and complications were intensified.

We may say, then, that so far as this short list of cases is concerned, the injections of gonococcus vaccine intensified the acute forms and produced no permanent cures of the chronic inflammations. This is in striking contrast to the report of Von Eberts and Hill, who cured specific urethritis and arthritis with one or two doses of 10,000,000 bacteria, using a stock culture. I do not think that I have seriously prejudiced my results by omitting the opsonic index, as, at present, the index is hardly accurate enough to serve as a guide. Moreover, if this vaccine treatment is worth anything to the general practitioner, it must be simple and time-saving, as well as effectual. The opsonic technique is certainly not simple nor short, nor in my hands have dead gonococcus cultures proven effectual.

In conclusion, gentlemen, I am sorry that I cannot report a series of brilliant results. However, I believe it is worth something to hear a truthful report upon a new treatment, used upon the plan which would be practicable for the every-day medical man.

THE MANAGEMENT OF ACUTE TRAUMATIC INFECTIONS.

By W. A. Snodgrass, M. D., Little Rock.

A traumatism is a solution of continuity of tissue. Inflammation is a disturbance of the mechanism of nutrition to the part involved, or the response of living tissue to the injury. An infection is the addition of pathogenic germs to the above conditions.

The process of repair may be called the re-establishment of the circulation in the part injured.

The management of traumatic infections depends entirely upon the question of tissue nutrition to aid the process of repair.

It matters not whether the tissues are destroyed by an injury at one blow, or whether they are destroyed by a process of bacterial invasion and suppuration. The process of repair depends entirely on re-establishing the nutrition to the part through the capillary arterioles. We know that the nourishment of all the cells of the body depend entirely upon arterial blood.

In clean wounds the cells reached by the trauma are the only ones deprived of nourishment by having their capillary arterioles disturbed. If germs do not enter such wounds, the process of repair begins at once. If the wound becomes inoculated with pyogenic germs, the process of degeneration and liquefaction of tissue begins.

It depends on the location of the wound, and the kind of infection as to how extensive this degeneration is going to be unmolested. If this infection is from one of the varieties of virulent germs, as the streptococci, we will have a rapidly spreading infection. If from a less virulent germ, such as the staphylococci, the infection would spread with less rapidity and become circumscribed earlier.

If wounds are clean, the only treatment needed is to approximate the parts and keep them clean with an absorbent protective dressing, and put the parts at rest.

REPAIR TAKES PLACE RAPIDLY.

First, by the contraction of the endothelial coats of the blood vessels injured, the lumen of the capillaries finally getting so small that the leucocytes or white corpucles become lodged in the injured vessels and the hemorrhage ceases. A capillary anastomosing circulation immediately begins to form by throwing out new vessels which pass into this mass of leucocytes and fibrin that have closed up the ends of the injured capillary vessels and re-established the blood supply to the parts. Within a short time new vessels will have crossed over the chasm, the circulation is complete and the leucocytes, and the exudate blocking up the injured vessels is absorbed by lymphatics and carried back into the general circulation. Nutrition to the part is supplied by the newly formed vessels and repair is complete with the development of very little connective tissue.

UNION BY PRIMARY INTENTION.

If the wound becomes infected, the mode of operation of pyogenic germs is to set up a process of fermentation; finally liquefaction or peptonization of the leucocytes and exudate.

Later the true tissues undergo the same process.

SUPPURATION.

This destruction of tissue extends until the circulation becomes so strong that it overcomes the suppuration or suppurative process, and an abscess wall is formed by the deposit of leucocytes in the vessels and connective tissue development. The collateral circulation passes around this deposit and the general circulation is no longer in communication with it. Finally, it breaks toward the point of least resistance, usually the surface or some hollow viscus, and healing of the cavity takes place by a process of granulation, connective tissue and new blood-vessel formation.

If this infection is from the streptococci, and the wound is in very vascular tissue, such as the scrotum, vulva, or the glans-penis, phlegma or local gangrene will be the result.

If about the mouth or mucous membrane, noma will be the result.

Admitting that the repair of injured tissue is the re-establishment of nutrition to the part injured, what should our remedy be?

A strong antiseptic when applied would cause contraction of the blood vessels and deprive the already starving tissue cells of their nourishment.

Or should it be a plaster of *mud*, anti-phlogistine, or a poltice supplying both heat and moisture, the essential elements to promote bacterial growth. One agent seems almost as irrational as the other.

Antiseptics applied to wounds retard union by their power of causing contraction of the new blood vessels by their astringent effect.

Poulticing by increasing the congestion in the part and aiding bacterial growth by supplying both heat and moisture, which is just as essential to their growth as it is to the sprouting of corn or cotton.

In my opinion, both methods of treatment should be condemned.

Let us study for a moment, the process of repair and see how nature does the work, and then look for the best method of assisting her.

Take a palmar abscess for example. They are caused by a small punctured wound in the dense fibrous tissue of the hand, which has a bountiful blood supply. It has been demonstrated that bacteria grow better under pressure. That is likely due to the fact that tissue under pressure cannot resist their invasion as well under pressure, which necessarily deprives the individual cells of their nourishment. It is also a fact that fluids and semi-fluids gravitate toward points of least resistance.

In the beginning we have an exudate thrown out from the general circulation, also a stopping up of the capillary vessels.

This exudate increases the pressure and closes the lumen of some of the surrounding blood vessels. Infection has already taken place, the growth of bacteria planted in this favorable soil begins at once.

The dense palmar fascia prevents it from coming to the surface, the tension increases,

and the pain increases in proportion to the amount of pressure. *If a poultice is applied, what is the result?*

First, increased congestion in the part and surrounding tissue; heat and moisture to aid in bacterial growth, new tissue is invaded, ptomaines from the bacteria start the process of peptonization or tissue liquefaction and extensive suppuration, destroying the fibrous, adipose tissue and tendons is the result.

When healing takes place some weeks later, there is a contraction of the fascias of the hand, destroying its usefulness permanently. If the wound had been opened and free drainage instituted by the application of a wet sterile dressing, which makes the best capillary drainage known, all the products capable of producing suppuration would have been removed before the suppurative process was established.

The same theory holds good for the management of bone-felons or other traumatic infections.

I think antiphlogistine (mud), poultices of flax-seed and all other such applications should be condemned, as well as ointments and healing salves, in the treatment of infected wounds.

Our efforts should be to support nature, and she will do the repairing. Remove the obstruction to the blood current, no tissue will suppurate or die unless the mechanism of nutrition is impaired.

Some of us no doubt have believed that we were curing wounds with antiseptics. I am fully convinced that the repair of tissue is strictly a mechanical and physical process. We cannot use antiseptics strong enough to destroy pathogenic germs without destroying the protoplasm of living cells. It is also impossible to get the antiseptic in contact with the germs after infection has taken place.

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Editorials

PURE WATER FOR LITTLE ROCK.

Two years ago the Committee of Public Health and Legislation, through its chairman, Dr. E. R. Dibrell, officially called attention of the Pulaski County Medical Society to the quality of water the Home Water Company was furnishing its patrons. Cognizance was immediately taken of this announcement and specimens of water were submitted to the Marine Hospital Service for examination. Further than reading the result of the analysis furnished by the Government and a request that the Committee continue their investigation, no further action was taken at that time. And happily or unhappily, the Fall rains came in time to relieve the water of its suspicious character, the people of their apprehension, and the matter was forgotten for the nonce. But another summer came, and the Water Company, drawing its supply from the same source as previously—the Arkansas river—furnished the same quality of water as heretofore. The subscribers of this company, comprising the majority of the residents of the city, were forced to slake their summer thirst and meet the water demands of the system by drinking a water which the Government had unqualifiedly pronounced as unpotable.

Evidences of the harm for which this water was responsible, were not only plainly observent to physicians, but the laity were aroused to the possible dangers to which they were subjected, and complaints began to multiply until there seemed to be a general demand for the Water Company to supply potable water to its customers—in other words to live up to the conditions of its franchise.

At this juncture the Committee again directed attention to the intolerable conditions, and

the Society clothed them with full authority to make such investigation and recommendations as the gravity of the conditions warranted.

As analysis showed the water to be safely free from disease-producing organisms, and therefore no danger to be feared from that source, the Committee limited its investigations to the manner in which the water handled at the Company's plant, the source of the excessive chlorides which it contain at certain seasons or stages of the river, and a plan whereby a pure water could be supplied.

Every opportunity was afforded the Committee for a careful and intelligent study of the water and the various processes through which it was subjected before delivered to the consumer. It was the opinion of the Committee that in so far as their investigations carried them, there was nothing in the customary chemical treatment of the water to which the excessive chlorides could be attributed, but that they were found in the river water at certain stages and seasons and were not the result of efforts at clarification. At least this seemed to be the only conclusion that could be reasonably drawn from the information at hand at that time. It was the further opinion of the Committee that as these conditions were beyond the control of the Water Company, there could not be any prospect or hope for a potable water for this city, as long as the Arkansas river was used as the source of supply. No defined plan was submitted showing how a pure water could be had. Happily or unhappily, the Fall rains came in time to relieve the water of suspicion, the people of their apprehension, and the matter was forgotten for the nonce.

Now, one question comes directly home to the consumer. Is Kansas responsible for the excess of chlorides which render the water of the Arkansas river unsuitable for drinking purposes? If so, then the Home Water Company might as well begin at once to find a way to reduce the excessive chlorinity, or look about for another water supply. There can be no dodging this matter. The people are entitled to a potable water, and the crusade begun by the Committee on Public Health and Legislation will find support in the people.

THE CAMPAIGN FOR MEDICAL LEGISLATION—ITS PROBABILITIES FOR SUCCESS.

I believe it may be safely asserted that every law upon the books today, whether State or Federal, that has for its purpose the promotion of health and the prevention of disease, has not only been favored by the medical profession, but has received its active and energetic support.

So many interests are seeking to secure the enactment or repeal of laws solely for private gain, and to that end maintain paid lobbyists to work for the success or defeat of nearly every important measure, that it is peculiarly refreshing to find the medical men of the State advocating measures that tend to promote the welfare and wellbeing of the community by improving the general health, even though it may injure active and lucrative practice. The real purpose of it all is to bring the physician into a larger sphere of usefulness in his relation to the public and to elevate the medical standard, by eradicating through the medium of wholesome legislation, those methods which tend to throw discredit and disrespect upon the profession. Singular though it may seem, even those measures that are designed to benefit a purely professional purpose, and might even be subject to the charge of having back of them a selfish motive, really operate to promote the public good. The laws of Medical Registration and Examination, while purporting to benefit the profession by raising the standard of requirement, in fact produce salutary results, wherein the community enjoys the larger share. Such legislation means, for the future, men better trained and stronger brained, and that should mean better health and longer life. Any movement that tends to uplift the medical profession and bring to its members the dignity of a universal public esteem, is a force for good to the public as well as the physician. The profession is respected according to its average. To raise the average, to strengthen the ethics, to broaden and develop the personnel, that is the simple duty of every doctor who has dedicated his life.

to a noble calling. The results of his effort are his best reward. For by his influence and power the average has been raised, and the layman unconsciously feels, not alone a greater respect for the medical profession, but a respect that oft-times borders on reverence.

The respect that legislators are bound to have for the medical fraternity, especially when engaged in securing wholesome reforms, is the best warrant of success. If it is wrong for the people to be preyed upon by charlatans who advertise, and be duped by vendors of nostrums, then relief can only be had through the co-operation and effort of the medical fraternity. There are many members of this Academy, known widely for their unselfish devotion to matters affecting the public health, who would exert a very powerful influence in moulding legislative policy, and whose appearance before the legislative committees would undoubtedly result in the recommendation of any bill, that sought to provide for the general health and welfare, or elevate the medical standard. The past decade has witnessed many important reforms of genuine value; but they owe their existence to the untiring efforts of some of the best men in the profession. Magazines and newspapers have entered the fight against quackery, patent medicines and medical advertising. It is a recognition of the fact that the medical profession can not be commercialized, and newspapers that encourage advertising quackery, not only do harm in that their publications are the medium through which money is mulcted from ignorant sufferers, but they can not be blind to the fact that they are harmful, and not one of them could afford a plausible argument in its favor. Some publications that blat about the public morals and smear an entire editorial page with their puritanical opinions, eagerly grab the tainted money that comes from fraudulent "dope-venders." It may be that the "dope-peddlers" and the cure-alls have suffered reverses because they can not bear the light that has been recently thrown upon them. Surely full credit should be given to those publications that have fought so vigorously and effectively to unmask the medical frauds of the land. No self-respecting newspaper, that pretends to exert a

healthy moral influence in the community, should practice hypocrisy by publishing medical advertising that it knows is false, and is intended to secure from poor and ignorant people their hard earned savings. The constant agitation of this question is certain, eventually, to result in barring from the public press obnoxious and dishonest medical advertisements. A few years ago a Federal Pure Food Law of the character that now exists was thought possible. Today, we have one remarkably thorough and sweeping in its provisions; but its jurisdiction is limited to interstate commerce, and the intention now is to pass a State law of similar character that will control all food and drug products of State commerce.

It seems entirely probable that a law can be passed by Congress, constitutional in its provisions, and designed to bar from the mails all publications containing fraudulent and harmful medical advertisements. The Federal Government has power to enact such legislation, and the need of it is strikingly apparent. This class of advertising is clearly intended to secure money by misrepresentation, and it does so largely by preying upon the credulity and ignorance of the public. No man or woman seeking medical relief, of the type most likely to be influenced by the high-sounding medical advertisements, is mentally fit for normal judgment. Their sense is warped by disease and suffering. They reach out like a drowning man grabbing at a straw, and buy "any old dope," or consult "any old doper" as long as their money lasts.

It is one of the functions of government to care for and protect the weak minded and the infirm. Government function has no limit as long as public policy is involved. The question is: does the individual or society need the care and protection of the State? In a way, the State is a foster-mother, and her protecting arm should be ever ready to render assistance to her citizens. We have laws providing for guardians for minor children; guardians for drunkards and for the insane. A father can not settle the claim of his minor child without the consent of the Court. This is a protection that the State throws about the helpless and the im-

mature. Otherwise, a drunken parent could release the claim of his offspring for a small fraction of its value.

Mr. Justice Field, speaking for the Supreme Court of the United States in the case of *Dent vs. West Virginia*, 129 U. S., said:

"The power of the State to provide for the general welfare of its people authorizes it to prescribe all such regulations, as in its judgment will secure or tend to secure them against the consequences of ignorance and incapacity, as well as deception and fraud."

This rule is founded in sound public policy. Under it criminals are deprived of their liberty. Vice and pauperism are controlled. Noxious trades are regulated. Nuisances are suppressed. Children are required to attend school and the property of infants and persons *non compos mentis* placed in the control of others. Likewise, the employment of children in factories under certain conditions is prohibited. And so the list might be almost indefinitely extended by specific instances of authorized legislative regulations, enforcing the social compact for the protection of life, health, morals, property and the general weal of the community.

If, therefore, the State possesses such broad powers as are here enumerated, why may she not undertake to protect her citizens against the smooth intrigue of the medical faker, who though he may have a license to practice, is merely using that license as a cloak to extract money from the ignorant and the feeble minded; and, likewise, the patent medicine vendor, when it is clear that his representations are dishonest and even fraudulent. They prey upon the credulous and the weak minded, who in most instances are suffering from some ailment, and the fear of death or serious illness—ofttimes born of ignorance—is readily kindled into terror by the charlatan. He is in no fit mental state to reason out his interests. He, therefore, falls an easy prey. If such public policy means anything at all, it ought to extend in such cases the full function of governmental protection, and thus relieve the ignorant and the diseased from becoming further reduced to pauperism by the designing efforts of the dishonest advertising class.

This legislative programme that has been outlined by the Ohio State Association is probably the most complete and far reaching of any that has been undertaken in this state. For this reason the most active committee the Academy needs is the Legislative Committee. Its organization should extend to every medical society in every county in the State. That committee should be composed of the best men in the profession, some of whom can afford and are willing to give their time and effort. This committee should place itself in touch with a few of the most representative legislators in each district in order to obtain a strong and influential force in both the House and Senate. It is certain that there will be much opposition, and especially from the advertising interests. Possibly the strongest antagonism will come from the press itself, and that is a powerful lobby to overcome.

The supporters of these measures can afford to conduct their fight in the open. They can meet and answer any charge of self interest that may be raised. They can force, if they will, every hostile interest to show its hand. The great and important fact to be everlastingly kept to the front, is the indisputable fact that these measures are intended for and absolutely certain to operate to the public good. Any unreasonable opposition to them is bound to be tainted with the odor of money. If the organized effort of the profession is what it should be, every bill introduced ought to pass. As someone has said: "It is not a case of injecting politics into medicine; but injecting medicine into politics." With these facts in mind, is there a physician in the State who can consistently refuse to do his part, if called upon by the Legislative Committee? Some will be wanted in Columbus to appear before the various committees, to interview legislators and to assist in compelling scheming and dishonest men to uncover. Several years ago the Anti-Saloon League started to fight. Today, the brewers have organized a Parity League of their own to moralize the saloon business. That is a plain, open declaration by the liquor interests of defeat. When a measure is right and is backed by a healthy fighting spirit no amount of opposition can stop it. Medical men have

kept out of the fight long enough. They owe a duty to the public if they shall continue to merit public confidence. The intellectual force and power of 8,000 medical men in Ohio, carrying with it the unlimited support and influential aid that able men must certainly command, borne on by the conviction of right and duty, is sufficient to sweep a dishonest lobby out of existence, and to compel the respectful consideration of any lawmaking body. There is no reason why a delegation from a hod-carrier's union should be shown more deference than a delegation of doctors. That is the fault of the doctors themselves. Not because they have no political standing; but because they prefer professional standing, and in consequence lack system and organization to produce results; not by political influence, but by the far greater and irresistible force of energetic moral conviction. Indifference, lack of conviction and effort, mean professional stagnation. With proper co-operation and enthusiasm, even though it be a dignified enthusiasm, the medical profession will secure whatever legislation it demands, because that which it demands is right and above suspicion. It will mean, more and more, a profession to be proud of, and one that will win to itself that which is its due, a genuine universal public esteem.—*R. D. Newcomb, M.D., LL.B., in Cleveland Medical Journal.*

THE DOCTOR VS. THE NOSTRUM.

WILL YOU HELP?

Having the insurance fight won, excepting only as against the New York Life, which is practically out of business in the State, our best energies, as individuals and as an organization are to be devoted this year, by direction of the House of Delegates, to securing pure drugs and to ridding ourselves of nostrums. The resolutions published herewith are direct and to the point. No doubt is left as to their meaning. It is particularly urged to refuse to receive from the post office, copies of trade journals. Many of the great pharmaceutical houses get out such sheets and send them free to physicians, hop-

ing to lure them into the use of their specialties. Most of these specialties, and all such so-called journals are conceived in fraud and brought forth in iniquity. Refuse to accept them and thus help to kill them.

Next, look through the pages of every medical journal to which you subscribe, whether it belongs to a State or other organization, or is supported by the members of the National Proprietary Association, the patent medicine vendors' collusive family, or what not, and if you find the nauseating advertisements of the blatant frauds already exposed by the Council of Pharmacy and Chemistry, write a personal letter to the editor, the publisher and each collaborator, calling their attention to such frauds. Do not talk about it! Write, and write today, and help to save our honorable profession from the vampires who exploit it, to its own shame and dishonor.

In addition to this we have arranged with the American Medical Association to keep a supply of the Manual of the Pharmacopeia and the National Formulary, on hand in our Journal office. Send 50 cents in money or stamps, and by return mail we will send you not only this valuable book, but also the latest revision of the List of New and Non-Official Remedies approved by the Council on Pharmacy and Chemistry of the American Medical Association, and the Propaganda against the use of Nostrums. In one of these two books will be found every medicinal agent necessary to an intelligent doctor. As suggested by one member of this meeting, let each of us get these little books and learn the honest remedies, that it may not be necessary to rely on the nostrums and our own ignorance.

Read these resolutions carefully, and, by the same concert of action as won the insurance fight, do your best share toward winning this one. "United we stand, divided we fall!"

COMMITTEE ON PHARMACOLOGY.

WHEREAS, the American Medical Association has established a Council on Pharmacy and Chemistry, composed of scientists of world wide reputation and standing, whose function is to examine pharmaceutical products in or-

der to be able to inform the profession as to the actual composition of said products, and,

WHEREAS, after careful examination of many hundreds of said products, it has officially announced its approval of a large number of them, and, in order to make clear to the profession the methods and purposes of their work, have published exposures of a large number of the fraudulent preparations that have been foisted on the members of the profession and, through them, on the public, by interested owners and manufacturers, frequently laymen, ignorant of the use of drugs, except their meretricious use, as examples of the much larger number which they have found of little or no value, or positively harmful, and,

WHEREAS, we believe that every physician in Kentucky is vitally interested in the work of this Council and desires in every possible way to promote its usefulness and interest, and,

WHEREAS, the greatest aid to the nostrum manufacturers in their nefarious and avaricious work has been the medical press, whether controlled by medical organizations, individual members of the profession or interest firms, and,

WHEREAS, we believe the time has arrived when the great profession of medicine, and all agencies controlled by it, should divorce itself permanently, finally and forever from those interests which, like ghouls, prey upon the sick and afflicted through the commercial sale of nostrums and dishonest so-called proprietary medicines, now, therefore, be it

Resolved, By the Kentucky State Medical Association, in annual session assembled, that we heartily endorse the formation of the Council on Pharmacy and Chemistry, that we extend it our confidence and congratulations on the splendid work already accomplished, and that we pledge it our unanimous support in its purpose of freeing our profession and its publications from nostrum control, and, be it further

Resolved, That we request every physician in Kentucky to secure a copy of the abridged U. S. Pharmacopeia and Formulary and be

guided by this and the approval of the Council on Pharmacy in their use of medicines; * * and, be it further

Resolved, That our Council be directed to communicate with the editors, owners, collaborators and publishers of the medical journals of this country on this subject, and to announce to the profession of Kentucky, through the columns of our Journal such publications as are willing to assist the profession by freeing their columns of nostrum advertising, and we hereby pledge our support to such journals even if they find it necessary to increase their subscription rate, and further, be it

Resolved, That we expressly condemn the publication of so-called medical journals by interested manufacturers of nostrums, and request the profession of the State to decline to receive them.—*Kentucky Medical Journal*, November, 1907.

Selections

SCOPOLAMIN AND SPINAL ANESTHESIA IN GYNECOLOGICAL OPERATIONS.—Gustav Klein (*Zent. f. Gyn.*, July 6, 1907) says that most of the statistics of results of anesthesia take no account of the deaths that occur from two to six days after the narcosis, from shock, from pneumonia, and from ether bronchitis. Chloroform acts on a degenerated heart muscle as well as on the muscles of the general system and the central nervous system. In anemic and cachectic persons the sleep obtained by scopolamin is most useful for operations of moderate intensity. Also in cases where ether narcosis is contraindicated scopolamin narcosis is of value to permit operations that could not otherwise be done at all. Scopolamin and spinal anesthesia are indicated in combination with chloroform or ether in some cases where less of the anesthetic can be given through their aid. Spinal anesthesia alone may be used in operations on the perineum, vagina, and vulva, as well as in celiotomy when no great pulling or tearing of the organs will be necessary, or there are no tumors of uterus or adnexa. In nervous patients spinal anesthesia

combined with scopolamin is most useful for all slight operations where it is not desirable for the patient to be at all conscious of her surroundings. When there is necessary pulling on the uterus or adnexa or total vaginal extirpation of either of these organs, and in abdominal operations with strongly adherent adnexa inhalation narcosis becomes necessary, but by the use of scopolamin combined with spinal anesthesia very little of the general anesthetic need be given. In the cases treated by the author no bad effects followed the use of these combinations.—*American Journal of Obstetrics*, October, 1907.

PROPHYLAXIS IN SYPHILIS.—Maisonneuve (Paris, 1906) reports his experiments with 10-per-cent calomel ointment as a prophylactic in syphilis recommended by Metchnikoff. Metchnikoff's original experiments were with mercurial ointment, but he found this was too irritating to the skin to be used as a general measure. Maisonneuve, after submitting himself to a careful personal examination, in order to definitely preclude any evidences of syphilis, allowed himself to be inoculated, in the sulcus coronarius on each side, from the virus of two initial lesions from two well-defined cases of primary syphilis. This in the presence of Metchnikoff and four other physicians. The skin was scarified and the virus thoroughly rubbed into the abraded surface. One hour after the inoculation the parts were treated with 10-per-cent calomel-lanolin ointment. Apes which were inoculated with the same secretion showed typical lesions of syphilis; others, likewise inoculated, remained free from syphilis. Maisonneuve submitted himself to careful examination for three months, without showing the slightest evidence of syphilis, and the wounds promptly healed within seven days.—*Southern Medicine and Surgery*, February, 1907.

THE TREATMENT WITH ARGYROL SOLUTIONS OF THE PURULENT OPHTHALMIAS.—The *Ophthalmic Record* for December, 1906, contains an article by Bruns in which he reaches the following conclusions:

1. The treatment of gonorrheal conjunctivitis with argyrol is efficient, provided it is

instilled often enough (every 15 to 30 minutes) to keep the diseased tissues practically immersed in the solution.

2. The instillation must be continued day and night so as to render the immersion constant and afford the gonococci no chance of unchecked activity.

3. Until the formation of pus has wholly or virtually ceased the eye should not be irritated by any manipulation or the instillation of any other substance.

4. The less virulent course of the disease when so treated confirms the belief that more strenuous methods often abrade the weakened epithelium of conjunctiva and cornea and open ways of invasion to the gonococci.

5. As always, the best results are had when the remedy is thoroughly applied in the beginning of the disease. This can be done no matter how swollen or brawny the lids; a thing not possible with less diffusible liquids or with those which must be applied to the everted lids. It is excusable to repeat that eversion is dangerous in the early stage when the epithelium is softened and pus formation still profuse.

6. Under this plan corneal ulcers are uncommon, and when they do appear are held in check and do not produce wide-spread destruction. Corneal ulceration, then, far from forming a contraindication, gives an additional reason for its vigorous employment.

7. Argyrol is not a powerful astringent; therefore, as soon as pus formation has ceased and the lids have become flaccid, AgNO₃ solutions should be applied to the everted lids once daily to hasten the reduction of the conjunctiva.

Soaking corneal ulcers once a day in a 50-per cent solution of enzymol seems to cleanse them, as well as the conjunctiva, and thus promote recovery. During this period the frequency of the argyrol instillations should be gradually lessened.

8. In monocular cases the safety of the unaffected eye is secured by instilling the argyrol solution but one-half as often as in the infected eye.

9. The method is far less painful, especially in the acute stage, than any other yet

proposed. This is an advantage not merely of good feeling, but enables us to treat many who, even at the cost of an eye, refuse to tolerate severer methods.

10. The author has never observed argyrosis following the use of argyrol.—*Therapeutic Gazette*.

AN EFFECTIVE FORMULA FOR CATARRHAL CHOLANGITIS AND ITS CONGENERS.—Charles Gilbert Davis, in the *Therapeutic Gazette*, July, 1907, says:

"For a number of years I have been especially interested in the medical treatment of diseases of the liver and gall-bladder, and while the surgical literature upon the subject of gall-stones is voluminous, not so much has been written upon the purely medical treatment of such conditions.

"Twenty-five years ago I began the use of salicylic acid in various pathologic conditions of the liver, and have ever since made use of this drug with satisfactory results. I have found it very satisfactory, particularly in combination with certain other drugs, as a chologogue and antiseptic whose effect is prolonged throughout the alimentary tract. In catarrhal cholangitis, with and without the formation of concretions, I have had the best of results from the use of the following formula:

Phenolphthalein, $\frac{1}{3}$ grain;
Acid sodium oleate, 1 grain;
Salicylic acid, pure, $1\frac{1}{2}$ grains;
Menthol, 1 grain;

Mix and make one pill.

"I believe that many cases ordinarily considered amenable only to surgical intervention can be satisfactorily treated at the patient's home by the use of this formula. My experience with it has been satisfactory, not only in the cases cited in this paper, but in others, that I am earnestly of the belief that ultimately cholangitis, with and without formation of stones, will cease to be a surgical condition, and will be amenable to satisfactory treatment through the application of such a formula as the one above referred to."

The following case, selected from a number reported, is illustrative of the treatment:

CASE V.—Mr. G. L., aged thirty-five years, single, stock broker, consulted me on November 30, 1906, stating that for six months he had been failing steadily in health. Complaints of pain in the epigastrium and back. Vomits frequently. Has occasioned chills and fever. His appetite is gone. His food distresses him. He has lost weight. He states that he has been treated for gastric ulcer, tuberculosis, and Bright's disease. His skin is yellow. Urinalysis shows slight trace of albumin, no casts. Bowels are alternately constipated and very loose. The skin is decidedly yellow.

The diagnosis made was catarrhal cholangitis, and treatment consisted of the administration of two pills every night and morning, followed by large quantities of hot water. The bowels remaining constipated, two more pills were ordered two hours after each meal, making in all ten pills a day. Immediate improvement was noticed. The treatment has been continued irregularly ever since, and there has been no return of the attacks. Patient's condition is very much improved in every way.

ACUTE RHEUMATIC FEVER.—Solomon Solis-Cohen, J. A. M. A., emphasizes as most important in acute rheumatic fever, rest, and, auxiliary to rest, strict individualization, whether specific medication, alkalization, diet, or the use of purgatives or diuretics, iron, blisters, precordial coils, ice bags, or of local application to the joints.—Davis, of Chicago, in speaking of specific treatment in acute articular rheumatism, says that, as we have no requisite knowledge of the cause of rheumatism, we cannot absolutely state that we possess a specific, although the salicylates possess many of the attributes of one. Almost from the time that rheumatism was clearly recognized, its cause has been believed to be a noxious foreign agent in the blood and fluids of the body, and at first this was thought to be autogenous. Many clinicians, confounding its pathology with that of gout, suspected uric acid to be its cause, and later professional opinion ascribed the same role to lactic acid. Comparatively recently, however, physicians have become convinced that acute articular rheumatism is an infection of microbic

origin. Naturally, therapeutic views have changed with these changing concepts of the nature of the disease. Attempts were made to eliminate the harmful matter by bleeding, by purgation, by emesis, and by diaphoresis. Such was the treatment of rheumatism until toward the middle of the last century, when it was widely believed that the disease was due to an acid in the blood, and probably to lactic acid. Therefore, alkalies were given as an antidote. It is true that many years before alkalies were prescribed empirically for rheumatism, but at this time they were used as a specific to neutralize the supposed cause of the disease. Although the alkaline treatment of rheumatism can no longer be regarded as specific, it deserves consideration, for it is used today, partly because the feeling still prevails in the profession that it is advantageous to neutralize some acid in the blood, and still more because statistics make it probable that the alkaline treatment averts endocardial inflammation. It has been definitely proved, however, that lactic acid is not its cause. The drugs used to increase the alkalinity of the blood are chiefly the potassium and sodium bicarbonates, citrates, and acetates. To make them efficient, enough must be given promptly to render the urine strongly alkaline, and it must be kept so. It usually requires from 1.0 to 1.5 grammes of these drugs, administered at intervals of from three to four hours, to accomplish this result. The manner in which they lessen the liability of those suffering from rheumatism to endocarditis cannot be explained. Although it must be admitted that the alkaline treatment of acute articular rheumatism is useful, it is in no sense a specific. In 1874 MacLagan advised the use of salicin as a specific in acute articular rheumatism. Soon thereafter salicylic acid was shown to have similar powers, and it was proved that salicin contains salicylic acid and depends on it for its effects in rheumatism. Because of the tendency of salicylic acid to irritate the stomach, sodium salicylate was soon substituted for it, and for a quarter of a century this drug has held its place as the best remedy for acute articular rheumatism. After describing the effects of the salicylates, the author takes up antipyrine as

a good substitute for rheumatism, although it deepens the anæmia and prolongs convalescence. Acetanilide and phenacetine, if given in quantities large enough to control pain, are only adapted to the treatment of very mild cases of short duration. Menges's serum has had some good results.—*New York Medical Journal*.

District and County Societies

BENTON COUNTY. ELECTION OF OFFICERS.—At the December meeting of the Benton County Medical Society, the following officers were elected for the ensuing year.

Dr. J. L. Clemmer, Springtown, President.

Dr. E. E. Pickens, Rogers, Vice President.

Dr. J. H. Beard, Gentry, Secretary and Treasurer.

Dr. J. W. Webster, Siloam Springs, Delegate to the State Society.

Dr. J. H. Beard, Gentry, Alternate.

Dr. Chas. H. Cargile, Bentonville, was elected to the Board of Censors for the term of three years.

BAXTER COUNTY.—The next regular meeting will be held at Cotter, Thursday, February 13th.

DALLAS COUNTY.—The Dallas County Medical Society voted at the last regular meeting to surrender its charter. Dr. C. J. March and Dr. W. H. Simmons, of Fordyce, were President and Secretary respectively.

JOHNSON COUNTY.—The Johnson County Medical Society met at Clarksville, January 6th, with Dr. W. R. Hunt, of Clarksville, President, in the chair. Roll call showed the following members present:

Drs. Hunt, Cook, Stewart, Smith, Kolb, Murphy and Horner. The minutes of the last meeting were read and approved.

Drs. Smith, Stewart and Hunt reported Clinical Cases. Dr. J. L. Stewart, of Spadra, read a paper on "La Grippe and Its Sequelae," which elicited a very earnest and interesting discussion, participated in by the other members present.

At the next meeting the Secretary, Dr. Cook, will read a paper on "The Treatment of La Grippe and its Sequelae, With Special Reference to Grippal Pneumonia." The next meeting will be held February 3rd.

PULASKI COUNTY.—On Monday evening, December 16, 1907, the Pulaski County Medical Society met in regular session at 8 p. m., in the rooms of the School Board Building, Eighth and Louisiana streets, with the following present: Officers—President Jno. R. Dibrell, Vice President O. K. Judd, Treasurer S. U. King, Secretary J. G. Watkins; members—Drs. E. Bentley, Carmichael, Christian, E. R. Dibrell, Jas. L. Dibrell, Gibson, McCaskill, Ogden, A. H. Scott, Smith, Snodgrass, Stover, Vinsolhaler, A. Watkins and Zell.

The minutes of the preceding meeting were read and approved, after that part of the discussion entered into by Dr. Snodgrass had been voted to be stricken from the record, on motion by Dr. Snodgrass.

Dr. F. Vinsonhaler read a paper on "Tuberculosis." In presenting his paper to the Society, Dr. Vinsonhaler deviated somewhat from the usual path and did not enter into the details of etiology, pathology and symptomology, but revived somewhat the early history of the tubercle bacillus, giving method by which it may be identified, and differentiated from other bacilli similar in appearance, and spoke of its length of life under various conditions and means whereby it may be destroyed. He spoke of tuberculous lesions appearing in different parts of the body and presented a drawing, illustrating a case of tuberculous nodules in the iris which he had seen, and which had apparently been cured by the use of tuberculin. He spoke of the ophthalmic reaction described by Calmette, as one of the means of arriving at a diagnosis of obscure tuberculous lesions and gave its technique. The writer spoke of the importance of sanitation and prophylaxis as the means of preventing the spread of tuberculosis, and thought a thorough inspection of dairies would be very beneficial in limiting its spread.

In the discussion that followed, Dr. Christian inquired as to the opinion of the writer

in regard to a probable return of the disease, at some subsequent time, in the case presented by drawing.

Dr. Gibson referred to Osler's article on tuberculosis, and from the knowledge gleaned therefrom and from other sources, did not seem to have so much confidence in the ophthalmic reaction.

Dr. A. Watkins spoke of the surgical form of tuberculosis and advocated dairy inspection, saying that careful inspection of cows, a clean dairy, a clean dairyman with clean hands and clean vessels, would probably limit considerably the spread of the disease.

Dr. Jas. L. Dibrell thought that greater care should be exercised in sweeping sidewalks, as he believed that a great number of the clerks who are prone to contract the disease probably do so in inhaling dust stirred up during the act of sweeping.

In discussing the paper Dr. Ogden thought the city ought to have a competent bacteriologist to make dairy inspections, and spoke of restrictions in Germany, on the sale of meats.

Dr. E. R. Dibrell referred to the importance of dairy inspection, and thought considerable good might result from earnest effort of the Medical Society, and spoke of the somewhat backward position of the medical profession in this part of the country in the use of tuberculin; but he did not seem to ascribe as much importance to therapeutics in the care of tuberculosis as to climatic influences and the recuperative powers of nature.

Dr. Christian did not think it necessary always to send patients so far away from home as is usually done, away from relatives and friends; that often considerable benefit could be obtained by sending patients to some of the rural districts in this State, where they would be closer to home and at considerably less expense.

Dr. Vinsonhaler closed the discussion.

Next in the order of business was the report of committee on Printing, Finance and Claims, which was read and approved.

A communication from Dr. McCormack was read and referred to a committee, after which the President announced the personnel of the various committees.

There being no further business, the Society adjourned.

SECOND MEETING.

On Monday evening, December 30, 1907, the Pulaski County Medical Society met in regular session at 8 p. m., in the rooms of the School Board Building, Eighth and Louisiana streets, with the following officers and members present: President John R. Dibrell, Vice President O. K. Judd, Secretary J. G. Watkins; members—Drs. E. Bentley, Jas. L. Dibrell, A. E. Harris, M. D. McClain, E. Meek, M. D. Ogden, W. A. Snodgrass and A. Watkins.

The minutes of the preceding meeting were read and approved.

Dr. A. Watkins read a paper on "Gonococcus Vaccine."

At the outset the writer informed his hearers that the paper was to be an unbiased report of cases of gonorrhea treated by injections of the sterile culture of the diplococcus of Neisser. He complimented the pioneers in their biological experiments, for by or rather from their efforts, much lasting good has already come. He reported a series of cases treated, giving manner of treatment pursued, and amount of dosage of gonococcus vaccine used. In summing up his experience, the Doctor seemed to conclude that this method of treatment not only did no good in the acute form, but seemed to aggravate it. In some of the chronic forms there was probably some temporary improvement. In carrying on this method the writer did not use the opsonic index as a guide; as he deemed it not essential, besides its technique being very impracticable for the ordinary practicing physician.

Dr. E. Meek discussed the subject from the standpoint of a general practitioner, saying that he regarded the presence of gonorrhea as a true index to a man's character, and that he usually tried to protect himself by securing his fee in advance.

Dr. Snodgrass, in discussing the subject, thought the disease not altogether a local one, as there are often manifestations in remote parts of the body.

Dr. Ogden complimented the essayist on his efforts, saying that much more benefit is usually derived from a paper of this character than from books, and that, too, it is fulfilling a duty one owes to the Society.

Dr. Jno. R. Dibrell referred to the opinion of Dr. Ross, of the Rockefeller Institute, and spoke of his method, and why he had failed.

Dr. A. Watkins closed the discussion.

There being no further business, the Society adjourned.

BOONE COUNTY.—The regular meeting of the Boone County Medical Society was held in Harrison on January 7, 1908.

Present—Drs. F. B. Kirby, T. P. Johnson, C. J. Floyd, C. M. Routh, A. J. Vance, R. S. Crebs, Swartz, Barnes, J. L. Sims and L. Kirby.

The Society, by unanimous vote, adopted and approved the resolutions of the Kentucky State Association, with regard to refusing to use nostrums or support medical journals that advertised such preparations.

Dr. J. P. Johnson reported a case of Diabetes Mellitus.

Dr. A. J. Vance, a member of the Committee on Progress of Medicine and Surgery, read an article on "Treatment of Burns by the Open Method," also a paper on "Izal in Treatment of Puerperal Fever."

Dr. Chas. Routh read a paper on "Pneumonia."

Dr. L. Kirby read a paper on "Cancer of the Uterus."

FAULKNER COUNTY.—The Faulkner County Medical Society at the December meeting elected the following officers:

Dr. Geo. S. Brown, President.

Dr. Geo. T. Henderson, Vice President.

Dr. I. N. McCollum, Secretary-Treasurer.

Dr. I. N. Munn, Delegate to State Society.

Dr. W. R. Greeson, Alternate Delegate to State Society.

All papers were freely discussed.

A motion introduced by Dr. Vance, requiring authors of papers to send title to the Secretary ten days in advance of the meeting at which they are to be read, each member to receive notice thereof, was unanimously adopted.

UNION COUNTY MEDICAL SOCIETY.— The regular meeting was held in El Dorado, January 6. "Treatment of Pneumonia" was the subject for discussion, and many valuable points were developed by those who participated in the discussion. The following officers for the ensuing year were elected: Dr. L. L. Purifoy, President; Dr. C. S. Pettus, Vice-President; Dr. H. A. Murphy, Treasurer; Dr. J. M. Shepard, Secretary; Dr. H. H. Niehus, Delegate to the State Society. Drs. I. M. George, Alvy Thompson, of El Dorado, and E. A. Thompson, of Wesson, are newly elected members. The February meeting has been postponed on account of an epidemic of LaGrippe, which is taxing the ability of the doctors to cope with.

Communications

To the Editor:

I see where the prohibitionists are preparing to make a grand rally in Arkansas with a view toward stamping out liquor. Since we know of so many patent medicines which are wolves in the guise of sheeps' clothes carrying all the necessities to produce a variety of "fiends," one of which is the "liquor fiend," and the milder of the fiends, it does look as though they would fight the battle all down the line if the crusade is purely along moral grounds. Why not include the greatest moral-wreckers of all, viz.: preparations containing morphine, cocaine, etc? Why do not they appoint a committee to act as detectives against "dope-joints," and "shady drug shops," as well as to detect the so-called "blind tigers?" In such shops they will find cocaine sold galore. This drug will destroy thousands, where one will be destroyed by a pure article of whiskey. Is it because of church obligations and affiliation or other obligations to an occasional druggist why such trade is not molested? Or is it that they feel it too massive an undertaking to attempt to chink all the holes at once? If the latter, they are only working in the tree tops.

C. R. Shinault, M. D

Little Rock, Ark., January 10, 1908

News Items

Dr. W. F. Smith has recently opened an Infirmary, at Clarksville.

Dr. T. E. Burgess, of London, Pope county, has moved to Knoxville, Johnson county.

Dr. Geo. S. Brown, a member of the Board of Medical Examiners for the Fifth District, and President of the Faulkner County Medical Society, was in Little Rock recently.

Dr. D. Norvell, one of the oldest residents of Hagarville, has gone to the State of Washington to make it his future home.

President Stephenson has appointed Dr. J. P. Runyan a Delegate to the Fourth Annual Conference of the Council on Medical Education of the American Medical Association, which will be held at the Auditorium Hotel, Chicago, April 13, 1908.

General News

The regular quarterly meeting of the State Board of Medical Examiners of the Arkansas Medical Society, was held in Little Rock, January 14, 1908. All members of the Board were present.

The students of the University of Pennsylvania Medical School have formed an organization, the purpose of which is to acquaint the undergraduates with the workings of the American Medical Association, after which it is very closely modeled. The various student societies take the place of the State organizations and elect members to a House of Delegates, which transacts all the business of the Association. An annual meeting is held, at which papers are read by chosen members, thus encouraging original research and a scientific spirit. The organization is named "The Undergraduate Medical Association of the University of Pennsylvania," and already has over two hundred and fifty members.

POSTGRADUATE COURSE OF STUDY FOR COUNTY MEDICAL SOCIETIES.

Arranged by John H. Blackburn, M. D.,
Bowling Green, Ky.

THIRD MONTH.

FIRST WEEKLY MEETING.

ANATOMY.—Articular Structures: Articular lamella of bone. Articular cartilages. Inter-articular fibro-cartilages. Synovial membrane, structure, attachments, secretion, synovial ligaments. Peri-articular Structures: Ligaments, structure, attachments. Muscles and tendons, tendon sheaths. Nerves and blood-vessels.

Endocardium: Origin, structure, thickness, reduplications, aortic valves, mitral valves.

ETIOLOGY OF ACUTE RHEUMATISM.—"Diplococcus Rheumaticus," staining and cultural characteristics. Other microorganisms.

Predisposing Causes: Heredity. Age. Sex. Occupation. Climate, season and locality. Diet. Epidemics. Chronic endocarditis and chorea.

SECOND WEEKLY MEETING.

ACUTE ARTICULAR RHEUMATISM.—Pathology: Changes in synovial membranes, peri-articular structures, cartilages, effusion, tendon sheaths. Changes in endocardium, pericardium, myocardium. Blood changes.

Clinical History: Prodomata, fever, angina, etc. Invasion, fever, chills, synovitis, pain, swelling, perspiration. Duration, defervescence.

Complications: Hyperpyrexia—Time of onset, cerebral symptoms, prostration.

Cardiac Affections—Endocarditis, frequency, time of onset, termination, diagnosis. Pericarditis, occurrence, forms, symptoms, physical signs. Myocarditis, association with other lesions, dilatation.

Pulmonary Affections—Pneumonia, pleurisy, accompanying cardiac lesions.

Nervous Complications—Delirium, coma, convulsions, chorea, meningitis.

Skin Lesions—Sudamina, erythema, urticaria, purpura. Subcutaneous nodules, distribution, pathology.

TREATMENT.—Prophylaxis: Exposure to cold, occupation, local predisposition, tonsillitis.

Internal Medication—Salicylic acid, its compounds. Physiological action. Therapeutic action. Untoward effects. Antipyrine and acetanilide. Alkaline treatment.

Local Applications—Counter-irritants. Cold and heat. External applications.

THIRD WEEKLY MEETING.

ACUTE RHEUMATISM IN CHILDHOOD.—(a) Insidious onset, anæmia, lassitude, epistaxis, etc. (b) Varied manifestations, chorea, arthritis, tonsillitis, carditis, skin lesions, pulmonary complications.

(c) Frequency of cardiac complications.

(d) Articular complications.

(e) Nervous symptoms.

(f) Nodules.

(g) Anemia.

MUSCULAR RHEUMATISM.—*Clinical Varieties.*

(1) Lumbago, onset, pain, temperature, pathology.

(2) Pleurodynia. Muscles involved, pain, diagnosis.

(3) Torticollis. Occurrence, pathology, pain, diagnosis.

(4) Myalgias, abdominal, dorsal, cephalic, etc.

Treatment: Relief of pain, analgesics, morphia. Electricity. Local applications. Cupping. Plasters. "Electric belts" and other fake remedies in rheumatism.

CHRONIC ARTICULAR RHEUMATISM.—Pathology: Synovial membranes, capsule, ligaments, cartilages, tendon sheaths, contractions, deformity, muscular atrophy.

Symptoms: Joints involved, swelling, pain tenderness, physical signs. General condition. Cardiac complications.

Treatment: Prophylactic—Change of climate and occupation. Hydrotherapy.

Internal—Iodine, physiological and therapeutic action. Guaiacum, therapeutic action.

FOURTH WEEKLY MEETING.

GOUT.—*Theories of Causation.*

Uric Acid Theories: (1) Increased formation and decreased elimination. (2) Decreased alkalinity of blood, without increased formation. (3) Excessive formation and accumulation, exciting inflammation. (4) A hypothetic ferment. (5) Accumulation from diseased condition of kidneys.

Clinical Varieties.

Acute Gout: Prodromata, pains, restlessness, dyspepsia, urine. Asthmatic attacks.

Attack—Time of onset, joints usually involved, local signs, temperature, length of attack.

Retrocedent Gout: Visceral or suppressed gout. Gastrointestinal, cardiac, cerebral symptoms.

Chronic Gout: Transition from acute to chronic. Joints involved. Deposits, location and chemistry. Deformity. Course. Associated conditions.

Irregular Gout: Heredity and lithemic state. (a) Joint and muscle pains. Muscles and joints usually involved. (b) Cutaneous eruptions. (c) Gastrointestinal disorders. (d) Cardio-vascular symptoms. (e) Nervous manifestations. (f) Urinary symptoms. (g) Pulmonary and ocular disorders.

ARTHRITIS DEFORMANS.—Etiology: Neurotrophic origin, reasons therefor. Bacteriology. Sex. Age. Social condition and nervous shock.

Symptoms: Acute—Frequency, age and sex. Relation to pregnancy and lactation. Multiple arthritis. Course. Chronic—Symmetrical arthritis, pain, physical signs, characteristic deformity of hands and feet. Muscles, skin, nails. Monarticular arthritis. Spondylitis deformans. Heberden's nodes, age, sex, joints, physical signs. Course of chronic form.

Diagnosis: Differentiate from acute rheumatism, chronic rheumatism and gout.

THE MODERN MILKMAID.—

"Where are you going, my pretty maid?"

"I'm going a-milkin', sir," she said.

"May I go with you, my pretty maid?"

"Get a doctor's certificate first," she said.

"Can't bring bacteria on any terms.

Cows are so apt, sir, at picking up germs.

Take a carbolic plunge and peroxide spray,

Don sterilized rubber clothes—then, sir, you may.

If you can prove that your germs are all dead,

Go with me milking, sir," she said.

"Might I assist you, my pretty maid?"

"Get a lactologist's license," she said.

"Then I will let you help clean up my stable;

Polish the floors just as bright as you're able;

Bed them well down with sterilized straw,

Germs have such fondness for milk in the raw!

Then treat the cows to a lively shampoo,

A bath in hot water, and carbolic, too,

Polish their teeth with a sterilized brush,

Spray out their throats, and do all with a rush.

Ten billion more germs'll be born ere you're through.

Get sterilized milk pails and stools for two,

Put a State seal on the sterilized door.

Spray the whole place with carbolic once more.

Then you'll be sure that the germs are all dead.

Yes, you may go with me, sir," she said.

—Garrett Smith, in *Hartford Times*.

Persistent hemorrhage after the extraction of a tooth is often relieved by the application of trichloroacetic acid. If the hemorrhage does not cease after its application, tamponade of the cavity is the next best available means of stopping the flow of blood.—*American Journal of Surgery*.

Civil Service Examination

EXAMINATION FOR PANAMA CANAL. PHYSICIAN (MALE).

February 19-20, 1908.

The United States Civil Service Commission announces an examination on February 19-20, 1908, at the places mentioned in the list printed hereon, to secure eligibles from which to make certification to fill vacancies as they may occur in the position of physician, at \$150 per month, in the Panama Canal Service. It is probable that about fifteen appointments will be made, this estimate being based upon the number of appointments made during the past year.

The examination will consist of subjects mentioned below, weighted as indicated:

Subjects and Weights:

1. Letter writing, 5.
 2. Anatomy, 5.
 3. Therapeutics, 5.
 4. Physical diagnosis (including questions relating to tropical diseases), 25.
 5. General pathology and practice (including questions relating to tropical diseases), 25.
 6. Bacteriology and hygiene, 5.
 7. Obstetrics and gynecology, 5.
 8. Practical experience, 25.
- Total weights, 100.

Applicants must indicate in their applications that they are citizens of the United States, graduates of recognized schools, and have had at least one year's experience as interne in a general hospital. Persons lacking the above qualifications will not be admitted to the examination.

The elements of experience will be rated upon the statements made in application Form 1312, and special credit will be given to physicians who show that they have been for more than a year members of the house staff of large metropolitan hospitals.

Men only will be admitted to this examination.

Age limit, 20 to 45 years on the date of the examination.

Each applicant for the Isthmian Canal Service will be required to submit to the examiner, on the day he is examined, a photograph of himself, taken within three years, which will be filed with his examination papers as a means of identification in case he receives appointment. An unmounted photograph is preferred. The name, place, and date of examination, the examination number, the competitor's name, and the year in which the photograph was taken should be indicated on the photograph.

The county officer's certificate in the application form need not be executed. No person will be appointed for service on the Isthmus who is not physically sound and in good health. Persons appointed to positions under the Isthmian Canal Commission will be expected to proceed promptly to the Isthmus. Persons examined for positions under that Commission will be eligible, as the result of such examination, to positions in the United States and Philippine services.

This announcement contains all information which is communicated to applicants regarding the scope of the examination, the vacancy or vacancies to be filled, and the qualifications required.

Applicants should at once apply either to the United States Civil Service Commission, Washington, D. C., or to the Secretary of the Board of Examiners at any place mentioned in the list printed hereon, for application Form 1312. The medical certificate in Form 1312 must be filled in by a reputable practicing physician other than the applicant. No application will be accepted unless properly executed and filed with the Commission at Washington prior to the hour of closing business on February 10, 1908. In applying for this examination the exact title as given at the head of this announcement should be used in the application.

Examinations will be held at Fort Smith, Little Rock and Texarkana.

Deaths

Nicholas Senn, M. D., the great surgeon, teacher and writer, died in Chicago, January 2nd, from chronic interstitial myocarditis of two years' duration, acute nephritis developing two weeks previous to death. Of the many eminent surgeons who have adorned the profession of America, none held a higher place in the estimation of the great body of the profession than Senn, and the honors he received at home and abroad were justly bestowed upon one of the world's greatest surgeons. His contributions to general surgical literature were many, and his researches in surgical pathology alone were in many instances epochal. He was original as well as brilliant, modest but brave in action. It can be truly said that he was the surgical idol of the West—the scene of his active professional career. The graphic description of his travels, interesting and containing much curious medical information, occasionally appearing in the *Journal of the American Medical Association*, will be sadly missed.

Book Reviews

A TREATISE ON THE PRINCIPLES AND PRACTICE OF MEDICINE. By Arthur R. Edwards, A. M., M. D., Professor of Principles and Practice of Medicine; Professor of Clinical Medicine in the Northwestern University Medical School of Chicago. Attending Physician Mercy and Ursula Hospital, etc. Illustrated with 101 engravings and 19 plates, 1328 pages. Lea & Febiger, Philadelphia and New York.

The range of modern practice is so wide that it would be almost impossible to cover every phase in a single volume, and to intelligently grasp a subject the reader must have all of the important items that the approach can be effected without wading through an ocean of matter to get a point. In this work the author has been careful to give most rational classification of diseases, from the main divisions down to subordinate paragraphs. This book on the practice of medicine is well directed; it deals ade-

quately with scientific theories and principles, and it recognizes as a final object the application of knowledge to the alleviation and cure of diseases. The work has a large number of tables giving differential diagnosis of diseases which are likely to be confused, in many instances entire subjects, such as those of the liver, kidneys and the chief eruptive diseases, especially those of the typhoid group. Surgical indications are only introduced where the medical and surgical overlap each other, and in this the blend is so very beautifully made that one scarcely realizes the merging of one into the other. The work is well written, and is especially recommended as a text book for both students and practitioners.—C. C. S.

INTERNATIONAL CLINICS: Quarterly. Illustrated Clinical Lecture especially prepared original articles on Treatment, Medicine; Neurology Pediatrics; Obstetrics; Gynecology; Orthopedics; Pathology; Dermatology; Ophthalmology; Otology; Rhinology; Laryngology; Hygiene; and other topics of interest to the members of the medical profession throughout the world. Edited by W. T. Longcase, M. D., Philadelphia, with collaboration of Osler, Musser, McPhedran; Billings; Mayo; Rotch; Clark; Walsh; Ballantyne; Harold and Kretz, with regular correspondents in Montreal, London, etc. Volume 4; 17th Series. Published by J. B. Lippincott Co. Philadelphia and London.

The International Clinics has a place in medical literature peculiar to itself. Volume No. 4 is equal to any volume that has been heretofore presented and in some respects, perhaps, it is a trifle better. To the medical practitioner who wishes to "post up" on the above subjects, the Clinics will no doubt be of material interest and assistance. We do not see how Messrs. Lippincott & Co., ever got the idea that a work of this character should be burdened with advertisements of such nostrums as Fellow's Hypophosphites, Ergo Apiol, etc. It is certainly objectionable. For our part, we never could see the advisability or propriety of carrying advertisements of any remedial agent in a work supposed to be presented to the profession, much less a nostrum.—C. C. S.

MODERN MEDICINE; ITS THEORY AND PRACTICE IN ORIGINAL CONTRIBUTIONS BY AMERICAN AND FOREIGN AUTHORS. Edited by Wm. Osler, M. D., Regius Professor of Medicine in Oxford University, England; Honorary Professor of Medicine in the Johns Hopkins University of Baltimore; Former Professor of Clinical Medicine in the University of Pennsylvania, and of the Institutes of Medicine in McGill University, Montreal, Canada, assisted by Thos. McCrae, M. D.; Associate Professor of Medicine and Clinical Therapeutics in Johns Hopkins University, Baltimore. Volume 3, Infectious Diseases continued, and Diseases of Respiratory tract. Illustrated. Lea & Febig Philadelphia and New York.

This book is a continuation of the well-known efforts of Dr. Osler, who has become of world-renown. The contributors to this volume are: Anders; Baldwin; Birkett; Boggs; Lawrance; Brown; Thomas R. Brown; Bruce; Christ Churchman; Cole; Dunbar; Dyer; Hare; Jozog; James; Lord; McCallum; McPhed; Osler; Pailiard and Ravenel. This work takes up Malta Fever; Beri Beri; Anthrax; Rat Glanders; Tetanus; Gonococcic Infection; Syphilis; Tuberculosis, Histology Etiology, Pathology; Symptoms, Diagnosis, Prognosis, Prophylaxis and Treatment. Syphilis and infectious diseases of a doubtful nature, Mechanics of Respiration and the Respiratory Tract; Diseases of the Naso-Pharynx; Pharynx and Tonsils; Typhoid Fever; Diseases of the Larynx; Diseases of the Bronchi; Lungs; Pleura; Pneumo-thorax; Diseases of the Mediastinum.

All of the subjects in this work are exhaustively treated. The writer has been favorably struck with the articles on Tuberculosis and Gonococcal Infections. These subjects seem to be handled in a way that admits of no further elucidation.

While it is not meant to convey the idea that other subjects have not been considered equally as well, yet it appears that these two subjects have struck the reviewer with more force.

Taking this system of medicine all in all, we do not believe there is any other work in existence that is equal to it as a text book for the practitioner and student. Osler's Modern Medicine is to the profession as the Unabridged Dictionary to the general public. The work is com-

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1907-8

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Sixth Councilor District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier counties. Councilor: R. H. T. Mann, Texarkana. Term of office expires 1908.

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Original Articles

WHAT WE, AS PHYSICIANS, CAN DO TO CONTROL AND ELIMINATE PULMONARY CONSUMPTION.*

By C. M. Lutterloh, M. D., Jonesboro.

I sometimes think we are not as proud of our profession as we should be. Many times our advice is sought for all conditions of ills. If we make an error in diagnosis and call small-pox measles, the laity are ready to criticise us severely, and justly so. It becomes our privilege to teach the people generally how to prevent contagious diseases—the red flag is a warning to the passer-by that scarlet fever or diphtheria lurks within, and every caution should be taken to keep away. Everyone thinks only of contagion and its consequences. It is our duty, therefore, to explain thoroughly all methods of prevention and therefore, to act as teachers. To the better element and to the more educated, our task is easy; but to the ignorant and careless, many times we must call in assistance of officers of the law. Boards of Health can and do render valued assistance in all such cases.

Next to the physician stands the public school teacher—his teaching carries much force, for he comes in direct contact with the child, and has the authority to correct any nuisance a child may be guilty of. It is the teacher, then, who teaches the laity. We can stand behind the teacher and urge him on in the proper way.

We need to consider that thirty-five hundred persons—many of them bread-earners—succumbed to the white plague last year in the State of Missouri alone. In the U. S. in 1900, there were 111,000 deaths from this dreadful disease. It is stated authoritatively that consumption claims one-tenth of all the deaths. For every 100,000 who die, 10,000 die of this disease. If all these persons could earn only 50 cents per day, this country would save each year \$18,250,000 in actual cash, besides to say nothing of the expense and

trouble these poor afflicted ones are to their relatives, neighbors, and friends. This disease, then, is a universal pest.

It is the plague of our nation, and should be suppressed. It has been demonstrated that we do not inherit the tubercle bacillus. That we inherit a weakness, a diathesis for the propagation and development of this germ is an undisputed fact: if this is true, we can keep from acquiring it by not coming in contact with the bacillus. If we inhale this germ—and our lungs are a good soil for its culture—we implant it in our system where it takes root as well as any other germ. We meet the contagious atmosphere, laden with bacilli, inhale it, and the development of the germ and the destruction of our lung-tissues begin. You will infer it is the sputum which contains the germs. We have all seen the dried sputum on walls of sick-room for months. We have seen educated and well-dressed people spit upon floors, carpets, and on trains, because these cars belong to a company, and with no thought of the welfare of even themselves or any one else: such being the case, we should enter upon a crusade against reckless and careless spitting. Cars and houses should be fumigated; laws should be enacted and notices placarded in all public places against spitting. In Chicago, in the street cars are posted, "Do not spit on car floor, nor in public places—a fine of \$5.00." This broke me from smoking because I had no place to spit. The sputum dries on the sidewalks, in cars, in public places, and we get it by contact, by inhaling the dried sputum, and hence, the bacilli.

The general public must be apprised of the method of the spread of this disease. We must teach the afflicted to expectorate on a paper or cloth and burn it. Cups have been prepared as retainers, but a very simple thing is a newspaper made into a cone which can be folded and carried in the pocket and used as a sputum retainer. It is a great task to convince these sufferers that this is necessary, but it can and must be done in order to drive this death-dealing monster from our country.

*Read in the Section on Practice at the Thirty-First Annual Session of the Arkansas Medical Society, held at Little Rock, May, 1907.

What, then, are the means we must employ for the eradication of this disease? First, see that the sputa are burned; secondly, that the patient should be dealt with honestly. Tell him what his ailment is, that in the very beginning or in the very incipency of this disease, we may cure fully 50 per cent. We therefore get his cooperation and his confidence for our honesty and candor. Tell him the story of Dr. Norman Bridge, the father of the only rational treatment, how he was examined, as a member of the Rush Medical College, by three bacteriologists in the city of Chicago, and every one of his special friends but who were not afraid of the truth, nor afraid to convey the exact condition to him. They told him he had tuberculosis, and that he had better leave the Chicago climate. He immediately left without winding up his business affairs. He went direct to Los Angeles, California, where the climate was uniformly mild and dry. He promulgated the rest, out-of-door and over-feeding treatment. It is said so thoroughly was he impressed with the ultimate success of this treatment, that he would not exert himself enough to get into his buggy, or tie his shoes, or pull off his shirt, but would have his attendant do all such things for him. He dressed heavily and remained out of doors all day long and most of the time in his buggy with his driver, never tiring or fatiguing himself in the least. He slept in a room with one side open, using much cover to keep warm and with no fire at all. Fresh air both by day and night was his motto. He ate from six to eight times a day and very nutritious diet, and as much fats as possible, sterilized ice-cream, butter and cheese in great quantities; easily digestible articles constituted his diet. He laid especial stress on this one point, that when we change climates for our health we practice every source of economy to save in our bill-of-fare, our desire being the most for the least money. His desire was the best at any cost. He soon became strong and well and returned to Chicago to have the same bacteriologists make another examination. The examination showed the absence of tubercle bacilli. His lungs were examined by the great blind Bishop, no cavities and no rales were found. He was pronounced sound and well and he felt that he should tell this story to his brother physicians.

Before his day and time, we would have our patients take deep breaths, inhalations and exhalations, go on long walks and become tired and weary. As well might we have the man who has a broken leg go about and walk and exercise it for the good of his injury, as to have lungs exercised when they are diseased, the system weak and debilitated. There is scarcely a home where a room cannot be selected and arranged for

sleeping, or that has openings where fresh air and sunshine are abundant, and away from the rest of the family. Our treatment should be explained thoroughly and the reason given for it.

We need not despair because our climate is bad and rainy, and the weather changeable. We must use plenty of bedding and clothing to compensate for weather conditions. Of course, a dry, warm climate is preferable, but I am told by those who go away to Albuquerque, that they live out of doors the most of the time and eat a great deal. We must not dishearten our patients, for we have known many cured who have had several hemorrhages, go to New Mexico, live in tents in that salubrious climate, and return here well and hearty, and even fat, even though such persons had been given up as hopeless by our physicians. These cures should encourage us, and we should encourage our despairing friends who have tuberculosis.

It is with much pride that we note that different states are making appropriations and building sanatoria. Missouri has built a villa with every room arranged so fresh air and sunshine can enter every day—with one wall of each room left open—at a cost of \$355,000. Our neighbor state, Texas, has recently appropriated \$50,000 for the erection of such an institution.

Musser, in the Journal of the American Medical Association states, in well conducted sanatoria with incipient cases, and with an experience of 17 years, 66 per cent remain well, 28 per cent of advanced cases remain well and 2 1-2 per cent of far-advanced cases have been cured. This is a record to be proud of and worth while to remember. Who can tell and how long before another man, not greater than Koch, but carrying further and more favorably his theory, will discover some antitoxine that will forever drive this disease from our land and country? Let us all hope that such a realization is now near at hand. Only a few years ago, death claimed 75 to 90 per cent of diphtheria, but today, not more than 8 per cent succumb when diagnosis is made early and the antitoxine used abundantly; but until that time shall arrive, let us tell the public that today, with our treatment as above outlined, the chances are about even as to success or failure in tuberculosis under ordinary circumstances. This will be good news to them and lend both the physician and patient encouragement and a determination on the part of the patient to get well, not to be despondent or disconsolate.

This paper would be incomplete if I did not refer to alcohol as a cause of consumption. We all know that alcohol produces degenerates—that it produces all sorts of nervous disorders and these in turn produce all forms of degeneracy. If the nerve is impaired and undergoes degenera-

tion, the organ which is supplied by it likewise undergoes degeneration. We see this in the alcoholic heart, the stomach and liver. It is equally certain to produce a pulmonary weakness, a lessened resistance to the invasion of the tubercle bacillus and therefore prepares the soil for the development of the tubercle bacillus. A case to illustrate this from the American Medical Association Journal. A harness-maker, strong and hearty, of healthy, robust parentage, was a constant beer-drinker, and after middle life, drank rum to excess. His wife was a healthy woman and lived to be 80 years old. Eight sons grew up and married, six died of consumption under 45, two daughters grew up and married, one died of consumption. Of the children of the eight sons, only ten grew to manhood. Four died of excessive drink, three of consumption, and two were nervous invalids. There was only one surviving member of this entire family, and he, while an eminent physician, is an inebriate. These men all married women of good vigor and without any alcoholic or hereditary taint. It is self-evident that alcohol destroys the integrity of the nervous system, and this in turn manifests itself in lowered vitality of every organ, and hence increases susceptibility to disease.

DISCUSSION.

Dr. Mann: I just wish to thank Dr. Lutterloh for his most excellent paper. I am sure we all have enjoyed it very much.

Dr. Guthrie: I feel that the time is too brief to undertake a discussion of this paper, and I only want to express my appreciation of it. I feel, from my own point of view, that this is one of the best papers this Society has listened to on the subject, and merely want to add my approval of it.

Dr. Hughes: I feel like it would be an injustice to Dr. Lutterloh to have a paper of that character read and not more freely discussed. than has been done. This is one of the subjects we ought to be more interested in today than anything else. As he clearly showed, the mortality is very high, and the disease is highly contagious; and, as he says, it is not inherited, but that the constitutional weakness is inherited, and in that condition infection is more liable to occur. I can recall a case of a family that had tuberculosis. The person who first contracted it died. The husband went and boarded for a short time with another family, neighbors. In the meantime he contracted phthisis. A lady where he boarded contracted tuberculosis and in a few months she died. This gentleman married again, and he and his wife died. Two of the children have died since, and one more of them has appeared to have a form of tuberculosis, and the man with whom

this child is boarding has tuberculosis now. They are people who live in a tightly closed room, and don't think of the sanitary arrangements. They have never been taught it. They ought to have plenty of pure, fresh air and sunlight. That's what we ought to teach our patients. The doctor can do more good along the line of advice in tuberculosis than anything else. We can do more good in the way of giving advice than in curing the patient after he has already contracted the disease. The treatment of feeding often has met with wonderful results. Some of the ablest men we have in this country on diseases of the lungs, endorse it. Those emaciated with the disease have been brought back to health.

Dr. Martin: I don't want to take up your time, but there has been one very important omission in the discussion of this paper, and also in the paper itself, which I think should be called to our attention. Whenever a patient has tuberculosis, and the physician can make a clinical diagnosis, nine times out of ten, his death warrant is signed when the doctor says he is dying of consumption. There is no use trying to fool a patient because we have seen a few get well by going to Texas, or living out of doors. Nearly all the patients that we say have consumption, and we can see they have it, die. You know that to be a fact in your own practice. The only case that we have any hope for, and the only case that even the scientist holds out any hope for in this day, is the case where diagnosis is made very early, too early almost for a positive diagnosis to be made, even with a microscope. In these cases, the diagnosis can only be made with the tuberculine test.

ACQUIRED SYPHILIS.*

W. E. Hughes, M. D., Pocahontas.

Syphilis has been known to the human family since before the birth of Christ, and destroys more lives, homes and happiness, brings more suffering, poverty and disgrace into the circles of homes, than any other disease known to the medical profession.

Syphilis is a constitutional disease, due to inoculation with a specific virus, the first symptom of which is the chancre, which makes its appearance from two to five weeks after exposure.

The chancre or primary sore is commonly found about the corona glandis, but may appear anywhere on the body, contracted directly by contact with chancre or secondaries, indirectly from articles used by syphilitics.

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It appears as an indurated papule, which develops into an abrasion, tubercle ulcer, the characteristics of which are, indurated base, and thin scanty secretions, inflammation slight around the sore, usually single, not auto-inoculable. Buboos are polyganglionic and painless, rarely suppurate and appear after an incubation period and are followed by secondaries; the Hunterian chancre is characterized by a greater depth, freer discharge and more marked induration.

The second stage consists in general enlargements of the glandular system, eruptions of the skin which may assume different degrees of severity and appearance, and at times inflammation of the iris or periostum, falling of the hair and a thousand and one other symptoms, too numerous to mention in this paper.

The pathology of secondary syphilis consists of congestion infiltration and ulceration.

The development of these secondaries is preceded by malaise, fever lasting for a few days and disappearing on the appearance of the eruption and sore throat.

The eruption of the skin may assume the appearance of erythema lichen, vesicular, bulous or pustular, so in diagnosing any of the above skin diseases it is a good idea to be on the lookout for syphilis.

In the mucous membrane we have congestion, as in the sore throat, then infiltration with maceration of epithelium (mucous patches) and finally ulcers.

Some of the most striking features of the skin eruptions are: absence of itching, symmetrical arrangement on the body, redish brown color, polymorphous. Many kinds of eruptions on the body at the same time and on fading turn almost white.

The mucous patches consist of congested infiltrated macules, the surface of which is from its peculiar position, continually moist, consequently becomes sodden, the appearance of which consists in an elevated flat macule covered with a dirty offensive exudation.

Tertiary syphilis consists of the gumma which has no tendency to spontaneous cure and is characterized by the formation of masses of cells granulated, which commonly infiltrate the surrounding tissue and break down in the center.

A gumma may break down, leaving an ulcer, or may be absorbed, leaving a fibroid thickening or scar.

The gumma may attack the periosteum, causing nodes, caries or necrosis; the cutaneous and mucous surface, causing ulcers on any part of the body.

These ulcers of tertiary syphilis are asymmetrical, and are not contagious. The tertiary ulcer begins as a gumma or lump, which, when it breaks, exposes a gray slough surrounded by gran-

ular tissue, and the edges are rounded and sharply cut, and have no tendency to heal except after receiving a specific treatment.

It is a fact that syphilis attacks every part of the body, bones, nerves, muscles, blood vessels, and is transmitted from parents to their offspring. However, I will not deal with any of the complications, but outline a short course of my usual form of treatment.

In the beginning, we should never under any circumstances begin treatment in a supposed case of syphilis until we have thoroughly substantiated our diagnosis, then my usual form of treatment is as follows:

In the primary stage, have the patient wash several times daily with black-wash and dust the affected parts with calomel, iodol, iodoform or some other like preparation.

Second stage, the usual treatment is mercury, as we all know. I give the proto-iodide on account of its convenience, varying the dosage according to the age and vitality of my patient and severity of the disease, for fifteen or twenty months, with any additional treatment I deem necessary.

After the secondaries subside, I give iodide of potash in a solution of chloride of iron, arsenic and bichloride of mercury for two or three years until every vestige of disease has vanished.

In conclusion, as a prophylaxis, I believe the medical profession should urge Congress to enact a law, compelling every man affected with syphilis to be castrated, and every woman to have an ovariectomy for the future benefit of the human family. Also I would endorse a law prohibiting any syphilitics landing on the soil of our grand old Republic.

SOME OBSERVATIONS ON PNEUMONIA, WITH REPORT OF CASES.*

By C. A. Archer, M. D., De Queen.

Pneumonia is a disease about which much has been written since Hippocrates first described it as "a disease quickly fatal and characterized by sputa of various colors." It follows from the babe in the cradle to "hustle from this mortal coil," the aged, debilitated and tottering old man. It attacks alike the degraded and unfortunate dweller of the tenement dens of our large cities, as well as those of the brown-stone fronts of the wealthy. Nor does it stop at this, but extends to forest and plains throughout this broad land of ours. It is found in the home of the agricultural prince as well as in the home of his most humble tenant.

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So, naturally, we are all interested in a disease so widely distributed, and to cite a few cases that have come under my observation, is the object of this paper.

Case No. 1.—Baby, female, age three years. A few hours before I saw her, she had had rigor, hands and feet cold, fingers and lips blue. Axillary temperature, 103 F.; pulse, 140; respiration, 40; skin dry and hot, urine scanty. Her bowels were constipated. Physical examination revealed nothing except a few dry, harsh bronchial sounds over right lung. Aconite and small doses of calomel followed by castor oil was given at once. I saw her twelve hours later and found the pulse and temperature lower; skin active, kidneys and bowels acting well. Examination revealed as typical a case of lobar pneumonia as I ever saw in the adult. The consolidation of the lower lobe or the right lung did not extend, and the case ran the ordinary course with complete recovery.

Case No. 2.—Mr. Mc., age 30, coal miner, who, on the cold gray dawn of the morning after a night's debauch, was taken with a severe chill. When I saw him his temperature was 105 F., pulse 100, full and bounding; difficult breathing, skin hot and dry; urine scanty and high-colored; constipation and vomiting with severe pain in left side. Engorgement of left lung. Strapped side, gave aconite, acetate potassium and calomel. Twenty-four hours later, consolidation was complete over left lung. Bowels and kidneys acting well. Whiskey and strychnine were added to the treatment. Ran typical course, fever terminated by lysis. There was some pleuritic effusion which was subsequently absorbed.

Case No. 3.—Mr. J., age 62; farmer by occupation and resided in river bottom; had had two former attacks. Consolidation of entire left lung; temperature, 102 F.; pulse, 140 and very weak; constipation and suppression of urine. Treatment consisted of calomel, digitalis, strychnine and warm baths. As malaria complicated this case, I tried the much-lauded iron and quinine treatment, but cannot say that it had any effect on the case, although he recovered.

Case No. 4.—Mrs. B, age 28, housewife; always had been strong and healthy. I saw her, with Dr. H—, 36 hours after she had had a chill, caused from exposure to a cold rain. Both lungs almost completely consolidated; respiration rapid, shallow and painful; anxious expression, diarrhoea, urine scanty and very acid. She died three hours later.

I had a series of cases in the spring, of 1906, which were characterized by general systemic disturbance, urine and feces strongly acid. The cases ran a typical course, but the patches of consolidation were small and widely scattered, and required very careful examination to find them.

They very likely corresponded to thickened patches left by previous attacks of "Grippe."

From my experience and observation with this disease, and with all respect and loyalty to the little bugs of Fraenkel and Friedlander, I think they play a very small role in the cause of pneumonia. I believe they are secondary to the primary promoting cause, which has its origin in the alimentary tract. Writers tell us that normal bile regulates intestinal digestion, yet they fail to tell us that in the absence of a normal flow of bile, fermentative changes take place. Evidences of this are the heavy fungus on the tongue, constipation, followed by acid discharges from the bowels, these discharges becoming clay-colored, green or black. Litmus shows these stools to be highly acid. This acid, toxic material is absorbed and deposited in the sheaths of muscles and nerves, causing rheumatic and neuralgic manifestations, and in the lungs, causing irritation, inflammation and pneumonia developing as the result. When called upon to treat a case of pneumonia, the first thing to do is to clean out the alimentary tract with an antiseptic purge, of which calomel is the best, and I have every reason to believe that many cases are aborted in this state by this treatment alone.

ADHESIONS FOLLOWING ABDOMINAL OPERATIONS.*

By Oscar Gray, M. D., Little Rock.

Within the past six months the writer has had occasion to perform laparotomy upon two different cases in which was found no other cause than adhesions. Each case had been previously operated on several years ago. One case, appendectomy, and the other for removal of tubes and ovaries. The pain suffered by each was about the same, each complained of dragging or pulling pains with more or less reflex pain in the adjacent locality.

In the case that had been previously operated on for appendicitis, I found a hard, tense, fibrous band extending from the peritoneum at the site of the original incision to a point on the ascending colon. In the second case, which had been operated on for removal of tubes and ovaries, I found the same character of adhesion, a firm, fibrous band extending from a point on the broad ligament and united to the descending colon. This was indeed a typical case, for there was no other source for the pain, the patient having had both tubes and ovaries removed, also the uterus.

After a thought on these cases, it has occurred to me that the surgeon, in his rush to get through

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with the operation, often overlooks the possibility of post-operative adhesions forming; that he does not employ the proper technique in all cases as a preventive measure. There are times when we are restrained from finishing the operation as we would like to; the condition of the patient, the danger of prolongation of the anesthetic, all have to be considered. The manner of leaving drainage is often the source of adhesions. The presence of an active peritonitis is one of the most prolific of all causes of adhesions.

It is the cases that the surgeon can prevent having post-operative adhesions that I wish to dwell upon. I do not know of any method or procedure that will keep adhesions from forming in every case, but I am convinced if the surgeon would employ the proper technique in the cases that gave him the opportunity, we would at least diminish these post-operative complications. The advent of Cargile membrane several years ago, gave promise of a great deal. Its ultimate success speaks for itself. I have never used it.

By the term "proper technique" I mean the thorough coaptation of peritoneal surfaces, the covering over of all stumps of pedicles by folds of peritoneum, the thorough coaptation of the peritoneal membrane following the removal of the uterus and the closing together of raw or bleeding surfaces on the intestine. When there is drainage left, and the upper or lower angle of the wound sutured together, let the peritoneum be brought together in such a manner that none of it will dip down into the abdomen. A safe method of procedure and one that I have followed that tends towards the prevention of abdominal adhesions, is to never sew up the peritoneum without first pulling down the omentum, and in the advent of adhesions forming let them be to this instead of the intestines. After this has been done and when the operator begins to close the peritoneum, it is a good idea to seize the peritoneum at the upper and lower angle of the wound with forceps or tenaculum, and hold it clear of the omentum or intestine. This will avoid the incorporation of any of these structures between the raw edges of the peritoneum.

The sutures used, play a limited role in the production of adhesions. The one I wish to condemn is the silk-worm gut. I think it could be entirely eliminated from the surgeon's cabinet and not be missed. When this suture is employed as a through-and-through ligature in closing the abdominal cavity, and when the peritoneum is not united beforehand with catgut, it leaves in many cases portions of the peritoneal membrane sagging down in the abdominal cavity to become united with the first thing with which it comes in contact.

I do not think the text-books on surgery lay enough stress upon the subject of post-operative adhesions. Where they mention it at all it is in the slightest manner, a manner that would not impress the surgeon with the importance it should receive. He sooner or later learns it, however, when his patients return to him and make their complaints known. He knows what the trouble is, but feels reluctant in telling the patient it will require another operation. He is likely to say: "You are fortunate in getting well, and I think these troubles of yours will soon subside." Then is the time when the surgeon would rather another treat the case. The surgeon will no doubt have a hard time convincing the patient it will not be necessary to perform a third operation to relieve the second, and such may be the case if the proper technique is not employed.

The subject of recent or chronic adhesions should be handled according to general surgical principles. Where there is a history of peritonitis the surgeon should not overlook the fact that it is his duty to explore the abdominal cavity in the search of bands of adhesions and destroy them before he closes the wound.

The prime object in most abdominal operations is to save the life of the patient. While we are doing this, let us endeavor to make the operation a complete success by employing every known method toward the prevention of post-operative adhesions when the occasion will permit.

DISCUSSION

Dr. Dickson: Mr. Chairman, it appears there are not many abdominal surgeons present. The subject is one of too much importance, I think, for us to pass it by. The author has given us a very good paper for the length of it. As for me, I always like one about the length of his, and enjoy it more than a long one.

Those of us who have had to deal with abdominal complications and abdominal adhesions, know that they are severe complications, and produce conditions that annoy a patient a great deal, and perhaps worry the doctor as much as the patient. The patient who is suffering from abdominal adhesion and consequent abdominal pain, has to tell his trouble to someone, and the doctor has to hear it. It is certainly an unpleasant thing for the doctor to hear, especially if there is a lurking suspicion in his mind that he has been the cause of it. Oftentimes it could have been prevented; many times it can not. Sometimes we will get adhesions in the abdomen; intestines adhering to each other and to the abdominal wall, and to the uterus, the pelvic wall, the bladder, and the vaginal wall, and the doctor can not prevent them. I don't care how careful he has been in his tech-

nique, it happens sometimes. It seems the slightest causes will sometimes produce adhesions—even putting the hand up and behind the intestines will cause them. The slightest blow upon the abdominal surface is sufficient to force the intestines into the pelvic cavity and cause distressing adhesion and intense pain. It certainly behooves every doctor opening the abdomen to use every precaution possible.

The author has covered the ground well. All raw surfaces should be hidden. They should be covered by the peritoneum, if possible. If not, the peritoneum will sometimes adhere to the abdominal wall with but the slightest handling. If you are doing an appendectomy, you are compelled to handle the bowel, and sometimes the slightest handling will cause adhesions. There is one thing we can make use of often, and that is Cargile membrane. We can tuck it in here and there and use it to good advantage.

I want to say this to anyone opening the abdomen, that the least amount of handling—and I don't care how gently you do it—the least amount of handling you can do the better results you will be likely to obtain, and the fewer explanations you will have to make and questions to answer. It is well enough to warn the patient along the line that notwithstanding the greatest care by the surgeon, abdominal adhesions may occur, and that fact should be borne in mind.

Dr. Lutterloh: The remarks of Dr. Dickson with regard to care in handling the bowel, I think should be emphasized, for handling the bowel in abdominal work can only produce raw surfaces and invite adhesion, and paralysis of the gut follow.

I think Dr. Gray should be complimented upon his technique. It would be well for every practitioner to bear it in mind in his every-day surgical practice.

Dr. Gray: There doesn't seem to be any occasion for closing the discussion. I thank the gentlemen for their remarks. I am very sorry that it was not discussed more generally.

As far as handling the bowel is concerned, I don't know that it causes so much adhesion as it does the likelihood to produce paralysis. My observation and experience in the past teaches me that adhesions are the result of peritonitis and infections of different kinds, as I have tried to outline in my paper, occasionally the cause is traumatic.

TREATMENT OF COUGHS

By E. H. Winkler, M. D., DeWitt.

The conditions causing coughs are legion. I say conditions, because we, as physicians, know

that cough is really a symptom, and not the disease, and it is useless to waste time explaining this to patients. Acute and chronic bronchitis, capillary bronchitis, croup, laryngitis, asthma, la grippe, pertussis, measles, scarlatina, pneumonia, elongated uvula, tonsillitis, reflex coughs from uric acid diathesis, rheumatism, cardiac troubles, etc., and last, but not least, coughs of phthisis, might be mentioned as some of the most common causes.

Cough differs in the same individual during an attack. It may be hard, dry, hacking, moist, with free expectoration of mucus, muco-pus and pus. Whatever the cause and condition, the patient wants to be rid of it in the quickest, easiest and pleasantest manner.

I presume everyone is familiar with the diseases mentioned above, and so will be brief as possible. What shall we do for the cough arising from them? The patient knows nothing of the cause, he wants relief. Of course he ought to have systemic treatment in many cases, but will he submit to it? He may be a stranger, just coming in and wanting a prescription for his cough. Cough remedies are on the market—patent, proprietary, non-secret, containing from two to a dozen ingredients, and with an efficacy (printed) that is just what the patient needs, till he tries them. Shall the remedy be in the form of a syrup, tablet, powder, or to be inhaled? It is urged that syrups disturb the stomach, precipitate other medicines that may have to be given in the course of treating other disease patient may have. Many patients dislike anything sweet; but in these days of palatable prescribing we must cater to the taste of our patients, and since many of them will be small children who can not dissolve a tablet on the tongue, and would spit out a powder, these things must be taken into consideration.

A thick syrup, not only holds the medicine in suspension, but also spreads itself over the diseased and irritated surfaces better than an aqueous solution. A powder, if large, is apt to get all over the mouth, in the nasal passages, and cause more trouble. The tablet or lozenge would seem to be the ideal way to administer a cough remedy, and since sugar is nearly always incorporated with it, it would be as pleasant as the syrup, and slowly dissolving on the tongue and keeping the medicant constantly applied to the diseased surface, should soon give relief. Since it as often fails as other remedies, shows its shortcomings. "Its all in knowing how," someone will say. In other words, if you have diagnosed correctly, and given the proper remedy, the patient will be cured. Easier said than done, and even when the diagnosis is correct and the proper remedy prescribed, failure results from

re-exposure, re-infection, relapse, complications untreated, reflex causes not discovered and treated, idiosyncrasies of the patient, and directions not followed.

In the treatment of coughs it is safe to say in this day of enlightenment, that the profession rarely prescribes morphine or any preparation of opium except codeine, heroin and sometimes apomorphine, and I do not believe the neauseant expectorants are prescribed as they formerly were. The patent and proprietary cough medicines that burden the shelves of our drug stores and country stores, almost without exception contain morphine, and are responsible for many deaths, especially among little children who are "doped" by their parents and every meddlesome old fool in the neighborhood. But this is digressing, and the patient wants relief. Take for instance, acute laryngeal cough. A hoarse, dry barking, continuous cough, the tonsils perhaps enlarged, the uvula inflamed and elongated till it rests on the tongue, every act of swallowing or breathing producing cough. The mucous collecting on the uvula and back of the throat keeps up a constant tickling sensation, and the patient coughs to dislodge it. All of this and more may be found in one or a number of cases, all presenting some differences. I have used for such, syr. white pine co., (N. F.) with and without codein and heroin. I give a mixture of ammon mur. 1 drm. to ounce of simple syrup, with excellent effect. I have used gelsemium tinct. sometimes with good, and other times no effect that I could see. Syr. tolu and heroin, and other preparations of like nature, made by various manufacturers, and I have used ad infinitum. For the tonsillar trouble, I have used some of the glycerinized pastes externally, generally with very little effect. I have gotten excellent results from ammon. tr. guaiac, one dram to four to six ounces of milk and the throat gargled as often as desired, directing patient to swallow some of the mixture. In children too small to gargle, I have it given to them like any other medicine. This, if used early in the attack, is one of the surest remedies we have, especially to abort tonsillitis. It must be used in the first twenty-four hours of the attack or it is useless. Calcium iodized, has served me well. Where they can do so, a one-third grain tablet dissolved on the tongue every ten to thirty minutes for several doses, or till relieved, acts almost magically. In children I have used it dissolved in water; ten to twenty grains in four ounces water, a teaspoonful ten to thirty minutes till relieved. I have given with this calcium sulphid to saturation to prevent suppuration of tonsils, and it seemed to have a beneficial effect on the cough when everything else failed. In the cases where I can use it, nothing has given me more satisfac-

tion, and the patient quicker relief than the following:

Codein sulph. gr. j
Pulv. ipecac et opii. gr. ij
Sach. lactis gr. xiiij
M. et ft. pulv. No. xvi.

Sig. One dissolved on tongue as needed to relieve cough.

In suitable cases I have given the following:

Menthol crystals.
Camphorae, aa. gr. v
Ol. eucalyptus,
Ol. gaultheria, aa. m. v
Fluid petrolatum, q. s. oz. j

M. To be used in an atomizer.

Sig. Spray nose and throat as often as needed.

In the coughs of capillary bronchitis, the tubes are plugged up with sticky, tenacious mucus. The child has no knowledge of coughing it up and spitting it out, and by the time the doctor is called to treat these cases, its vitality is so low that it could not do so. The latter condition prevails in the very old who contract this disease. Here potass. bichromate is an ideal remedy, one grain to four ounces water, one-half to a teaspoonful given every five or ten minutes will loosen and thin the mucus till it is easily gotten out. and it seems to have a double action, in that it keeps more from forming. I use it alone and also in combination with ammon. mur. which has a similar double action, and in combination with calcium iodized when the tonsils are affected. Those who have never used the remedies will find them to answer more indications in these cases than almost any drugs they carry. In asthma and croup they are the quickest, surest and least harmful remedies one can use. In pertussis, I saturate the system with calcium sulphid, give atropine when secretion is excessive, a tonic to tone up, and with some cough syrup or a mixture of potass. bichrom. and calcium iodized for local irritation, it never reaches the whooping stage.

In the coughs of children due to mouth breathing from adenoids, these must be removed before much can be done, and when removed very little else is needed. When due to enlarged tonsils and uvula, the family will rarely permit an operation for their removal, and it takes persistent treatment to do any permanent good. A mixture of equal parts of tr. iodin and glycerin painted on them daily, also the continued use of calcium iodized alone or in connection with it, will reduce them, and the use of ammon. tr. guaiac as previously mentioned will keep them in good condition. I have used tr. ferri chlor. two drops to two ounces glycerine, directing one-half to a teaspoonful two to four hours, or sometimes direct

it like the cough mixtures, a few drops every few minutes without water.

There is nothing peculiar about the coughs of asthma, la grippe, measles, scarlatina, pneumonia or phthisis. There will be found as many variations and differences as there are patients. Each one will be a law to itself. Many cases do not need any special treatment for the cough, and many physicians do not give anything, while in many cases they will prove a factor of great importance. When the cough is so hard and continuous as to prevent sleep and rest, producing irritation of the throat, swallowing becoming difficult and painful, remedies should be given. In inflammation of stomach, liver or peritoneum, an opiate is indicated.

Reflex cough would only require treatment of the cause to cure, but unfortunately we do not often see the patient till it has existed so long that the cough requires treatment as well as the cause. Often the cause has progressed beyond cure, and the difficulty of getting the patient to take other treatment, makes these cases very unsatisfactory to treat.

We have already spoken of the variety of cough mixtures and remedies with which the market is flooded, and to these may be added the combinations of the doctors. We wish now to mention the method of administration as well as the remedy. With the very young it must be in a liquid form, the tablet and powder being impracticable, and many adults balk at anything else but a cough syrup. Inhalation, especially with steam inhaler in the country, is hardly to be considered, and unless used intelligently will do very little good. The same may be said about the use of atomizers in general, but the people are being educated up to these things, and there are many cheap, serviceable inhalers and atomizers on the market.

The majority of cough mixtures contains the neauseant expectorants, and no amount of syrup and flavoring will entirely mask the taste, and the greater number of patients, especially children, want some water at once after taking it. Of course if we are giving the medicine for its systemic effects alone, the drinking of the water will do no harm; but if the cause is in the throat, as it is in the majority of cases, the water will wash it off the diseased surface and nothing will be accomplished.

And then the length of time between the doses is important. If too long, the patient will cough himself to exhaustion between doses, and dose will have to be increased, and then not do much good. My almost invariable directions are: Give a few drops every few minutes, without water, as needed. This is almost like a continuous stream going over the inflamed surfaces, and a

teaspoonful given in this manner will do more good than an ounce as usually given. It soon soothes and heals. It is explained to the patient that the mixture is harmless, that it is the smallness of the dose with the method of giving that does the work. I keep such directions printed for the purpose.

I believe I have used about everything in the Pharmacopoeia's list of cough remedies in the search for the best and for specific indications, and in this as in all troubles, every case is a law unto itself. But I wish now to mention a special treatment for asthma and phthisis that has given me excellent results in the few cases I have tried it in, and I believe deserves a more extended use by the profession. This is the treatment devised by Drs. Stoval and Twitty of Columbia, Ala., and is as follows:

R

Iodine, resublimed, U. S. P. gr. iv.
Carbon disulphide, U. S. P. dr. j.
Mix and add to deoderize,
Menthol crystals gr. iij.
Ol. carophylli m. viij.

Fig. 5 to 15 drops on the gauze of an inhaler, and inhale deeply for five minutes, repeating every two to six hours. I believe I have made a little improvement on their formula, both as to efficacy and odor. I use the following:

R

Iodine, resublimed.
Menthol, crystals aa. gr. iv.
Ol. carophylli, m. viij.
Creosote, (Merck's),
Carbon disulphide, aa. dr. j.

M.

Fig. 5 to 15 drops in inhaler and breathe (or inhale) deeply from 5 to 15 minutes, repeating two to six times daily.

The creosote not only aids in masking the "stink" but adds to the treatment in every way. When first used it irritates, but the patient soon gets used to it. I have used various kinds of inhalers, improvising them as needed out of some of the menthol inhalers to be found in the drug stores, cleaning them out and putting in gauze. Remove the plunger of a small glass ear-syringe with bent tip, pack in gauze, and with a tight cork for the large end when not in use, you have as good an inhaler as is needed, and it is cheap and easily sterilized. The bent tip with the enlargement fits in nicely between the lips, and the gauze can be removed as desired. The medicine is of course very volatile, but the warmth of the hand increases its volatility. I caution the patient about opening the bottle near a light or fire. It is best dispensed in glass-stoppered bottles, and I make up an ounce at a time.

We do not have many cases of phthisis or asthma in this section of the country, and I have not had many patients so afflicted; but in the few that I have tried in on, it has certainly given me splendid results. Cough and sweats cease, and the patient gains weight. In fact every symptom is improved. Of course the doctor will combine appropriate tonics and such treatment as any

other complication may demand. In some of the so-called hopeless cases it has prolonged life remarkably, and with so much comfort to the patient. In asthma I have not had a failure. I believe the treatment should be given a thorough trial. I am thinking very strongly of using the oil of cinnamon in place of the oil of cloves, but whether I will gain anything by it remains to be seen.

ANNOUNCEMENT.

The Thirty-second Annual Session of the Arkansas Medical Society will be held at the Auditorium, Little Rock, May 13, 14 and 15, 1908.

The House of Delegates will convene for the transaction of business on May 12th, one day in advance of the General Session.

The Hotel Marion will be official headquarters.

Five hundred members are expected.

For further information address the Secretary.

THE JOURNAL

OF THE

Arkansas Medical Society

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Edited by

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Secretary Arkansas Medical Society

108 Louisiana Street, Little Rock, to whom all business communications should be addressed.

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the State, changes of location, etc., are requested.

REMITTANCES.

Remittances should be made by check, draft, registered letter, money or express. Currency should not be sent, unless registered. Stamps in amounts under one dollar are acceptable.

ADVERTISING RATES.

A schedule of rates will be furnished upon application.

ADVERTISEMENTS.

Advertisements should be received by the 8th of the month to insure their insertion in the current issue.

CHANGE OF ADDRESS.

Change of address will be made if the old as well as the new address be given.

CONTRIBUTIONS TYPEWRITTEN.

In order to lessen liability of errors, contributions should be typewritten.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

Editorials

THE POLITICAL DUTY OF DOCTORS IN THE PRESENT CAMPAIGN.

The fiercest political battle in the history of Arkansas, now in full blast, is being fought out among the candidates for the various state offices; and from present indications it can be safely prophesied that the pyrotechnical displays will equal, if not surpass, those of the three memorable campaigns preceding this one. At first there was promise of a clean and honorable contest conducted according to rules of ethics: a contest in which principles would be discussed and the people permitted to draw their own conclusions as to the most available candidate. But alas and alack! The tongue of mendacity and maliciousness could no longer remain silent under the restraint public decency had enjoined upon it, and breaking from its moorings, began the manufacture of a product of lies and slanders the like of which have not been seen even in former campaigns. The lies and slanders involve men whose lives have ever been an open sesame, and with charges of graft, greed and corruption, counter-charges of liar thief and boodler, principles and platforms have been forgotten or cast aside.

It is not the province of this JOURNAL to dabble in politics, and it is only to offer a word of advice that this is written. As physicians, we are more interested in the character of men elected to the Legislature and the principles for which they stand, than the successful candidate for Governor. Many important measures to be recommended by the Committee on Medical Legislation, will come before the next General Assembly for passage into laws. The influence of the Governor is worth much to any measure, but laws are passed by the General Assembly, and it is of that body alone that we can secure relief from present bad conditions. The duty of every physician is to use his influence for men who pledge themselves to exercise intelligence in the discharge of their duties toward the demands of our organization. It would be better to have pledges, but a broad-minded and intelligent man needs no whip to make him do his duty; while the cunning would break his

Physicians, Attention! DRUG STORES AND DRUG STORE POSITIONS anywhere desired in the United States, Mexico or Canada. F. V. KNIEST, Omaha, Neb. Easy Terms.

word without any lapse of conscience. It is purely a question of voting for and using the greatest influence for the very best man.

Before a physician pledges his support to a candidate for the General Assembly, ask him if he would favor the following measures:

I. An amendment to the present medical law allowing only graduates of recognized and reputable medical colleges to apply for license before the Examining Board.

II. A law converting the old State Capitol into a Charity Hospital, at which the worthy poor and afflicted might receive free medical and surgical treatment.

III. A law creating a *genuine* State Board of Health, increasing its scope, and making sufficient appropriations for its purposes.

IV. A law requiring the registration of births and deaths.

V. A law designed to prevent the sale of fraudulent nostrums.

VI. A law providing for the building of a State Sanatorium for the tuberculous.

VII. A law permitting the operation of vasectomy on degenerates.

VIII. Any law endorsed by the Arkansas Medical Society, having for its object the improvement or betterment of state-wide sanitary conditions.

A candidate for the Legislature who balks at giving an unconditional endorsement of the above measures, could not measure up to that standard of fitness required by an intelligent and progressive profession, and it would be sheer folly to expect him to develop additional virtues not previously possessed once he has taken his seat.

NOTICE TO SECRETARIES.

As it is none too early for the secretaries of component societies to begin filing their annual reports, blanks are being mailed for that purpose. Experience teaches that many reports are delayed until the last moment, and naturally incomplete information is furnished. It is earnestly requested that work be begun at once to make collection of dues, gather all the information requested on the blank, and send in as early and rapidly as possible. If a complete

report cannot be made now, send in a preliminary one so the Secretary may begin to utilize the information gathered.

It is especially desired that the name and address of every undergraduate in the county be furnished.

COMMITTEE ON OPHTHALMIA NEONATORUM.

President Stephenson has appointed Dr. R. H. T. Mann, Chairman, Texarkana; Dr. J. W. Scales, Pine Bluff, and Dr. H. Moulton, Fort Smith, a Committee to co-operate with the Committee on Ophthalmia Neonatorum of the American Medical Association. The duties of the committee are to make inquiries concerning ophthalmia neonatorum in this state, to summarize their conclusions and forward the same to the Committee on Ophthalmia Neonatorum of the American Medical Association in order that the facts gathered may be presented to the Association at its next meeting in Chicago, June 2-5, 1908. Statistics show that 33 per cent of blindness is due to ophthalmia neonatorum, and the disease being preventible, the importance of prophylaxis cannot be underestimated. Cognizance of these statistics by our law-makers and knowledge of the measures of prevention, must ultimately result in the passage and enforcement of laws that will reclaim one blind child out of every three.

USE ALKALOIDS.—James Burke in *The Lancet-Clinic* suggests that we meet the constant changes in the pharmacoeptial strength of remedies by dropping them altogether and prescribing the alkaloids and other active principles which never change.—Vermont Medical Monthly.

DR. CANFIELD MOVES TO WASHINGTON.

The many friends of Dr. H. H. Canfield, formerly of Siloam Springs, will regret to learn of his removal from Arkansas where he has been so intimately and actively identified with organized medicine so long. He is an honored ex-vice-president of the Arkansas Medical Society and has been one of its most active and pro-

gressive members. His contributions to the scientific work of the Sessions have been of great interest to the members, and his delightful oratory, to which we have annually listened with great pleasure, will be missed on future occasions. Dr. Canfield's new address is 3620 Densmore Ave., Seattle, Wash.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION.

After two or three years of wrangling as to the expediency of discontinuing the "Transactions," the Indiana State Medical Association has shown its wisdom in launching on the sea of state medical journalism one of the cleanest and most handsome crafts that monthly floats into our harbor. Dr. Albert E. Bulson, Jr., is the editor, and his foreword as to the policy the Council will pursue in the matter of advertisements accepted for publication, and the work he hopes to accomplish for organized medicine, presages a great influence and usefulness for the Journal. With the united and enthusiastic support of the membership of the Association, the ideals set for it by those who have so long advocated its publication will be quickly realized. The Journal is so much like us, we are justified in claiming it as our twin sister, and just know that we will grow to be very fond of it as time passes on.

DR. WILLIAMSON'S REPORT.

At the Annual Conference of the Committee on Medical Legislation and the National Legislative Council of the American Medical Association, held at the Auditorium Hotel, Chicago, December 10, 11 and 12, 1907, Dr. O. H. Williamson, of Marianna, Chairman of the Committee on State Legislation and Public Policy of the Arkansas Medical Society, made the following report:

Boards of Examiners.—The law provides for three boards of examiners, Regular, Homeopathic and Eclectic, and allows any one to apply for examination without regard to educational qualification.

Board of Health.—The State Board of Health is without power, because the law makes no provision for its financial needs.

Pure Food and Drugs.—Arkansas has a pure food and drug law that is practically identical with the national law. Cocain can not be sold in any form, except on the written prescription of a physician, and can not be refilled.

Osteopathy.—The osteopath is not allowed to use drugs or to practice surgery or obstetrics.

"Patent Medicine" Vendors.—No itinerant vendor can sell medicines in Arkansas.

Proposed Legislation.—At the next meeting of the legislature of Arkansas (January, 1909) an attempt will probably be made to pass a law recognizing the State Board of Health and asking an appropriation for its use. A bill requiring all candidates for examination to present a diploma from a reputable medical college may also be introduced.

INTERNATIONAL CONGRESS ON TUBERCULOSIS.

The coming International Congress on Tuberculosis at Washington, D C., in September, 1908, will be an unique event in the New World.

This Congress meets once in three years, it has never met in America, and after 1908, will not meet in this country for many years to come.

The Congress will put the people of this country in the relation of host to the leaders of this movement in all parts of the world. It will be a real world's Congress. It will carry on, for three weeks, public discussions of the Tuberculosis problem, led on by the most eminent authorities on this subject, in this and other countries. Official delegates will be present from nearly all civilized countries. There will be a course of special lectures to which all members of the Congress and the general public are invited.

The Congress will be divided into seven sections, giving ample scope for participation of both scientific and lay members.

There will be a great TUBERCULOSIS EXPOSITION, in which one can see what is going on, the

world around, in the campaign against Tuberculosis.

There will be CLINICS and DEMONSTRATIONS throughout the whole period of three weeks, giving medical and lay delegates object lessons on the causes and prevention of tuberculosis.

Selections

A PRELIMINARY REPORT ON CALCIUM CHLORIDE IN THE TREATMENT OF HEMOGLOBINURIC FEVER.

The mortality of hemoglobinuric fever is high and its treatment one of the most disputed points in therapeutics. It is not surprising, therefore, that the report of Vincent (*Comptes rendus Societe de Biologie*, Dec. 15, 1905) on the use of calcium chloride in this condition was eagerly welcomed.

This writer used from four to six grammes daily by the mouth, or one or two grammes in normal salt solution hypodermically. In cases of susceptible persons in whom an attack of blackwater fever could be elicited at will by quinine, he was able to prevent this attack by the preliminary use of calcium chloride. In the treatment of cases of blackwater fever he found this agent to be possessed of remarkable anti-hemolytic power.

Calcium chloride has been used successfully in paroxysmal hemoglobinuria by Saundby, and in hemophilia by Wright, Carrierre, Arthus, Labbe, and others.

I have been unable to find in the literature any further reports on the treatment of this condition by calcium chloride, hence the following notes on four cases in which I have recently had the opportunity of testing this agent may be of interest:

Case 1.—J. R., white, male, aged thirty-six, occupation liveryman, had lived in a malarial locality twenty years. He had a number of previous attacks of hemoglobinuria, and stated that his urine would get almost black nearly every time he had fever. He had had fever about a week, and took two teaspoonfuls of a patent preparation, containing cinchona deriv-

atives in some form, every three or four hours for three days prior to onset of hemoglobinuria. At noon of September 21, 1907, without a chill immediately preceding, he noticed that his urine was very dark. I first saw him three hours later. His pulse was 100, temperature 101°; no jaundice of skin or scleræ was present. He was vomiting persistently; the bowels were constipated; there was pain in his head and lumbar region; the liver was tender; the spleen was tender and extended two inches beyond the costal border. His urine was portwine in color; the specific gravity was 1018; albumin was abundant; hemoglobin was present, but no bile. The microscopic examination showed urates, a moderate number of round and spindle epithelia, numerous hyaline, granular, and epithelial casts, and more red blood cells than in any case I have ever seen. The blood examination failed to reveal parasites; the small mononuclears were 18 per cent, large mononuclears 42 per cent, polymorphonuclears 40 per cent.

The treatment consisted of calcium chloride, in solution, 10 grains every three hours; and morphine hypodermically for the vomiting. At 7 p. m. he had a rigor, and another at 7 a. m. the next day. His jaundice was only slight, and vomiting had ceased. The urine cleared and remained so forty hours after onset; the temperature remained normal from forty-four hours after onset.

Case 2.—L. W., white, female, aged twelve, born in Lee county, Arkansas. Her father had hemoglobinuric fever twenty years ago. She had frequent attacks of malaria, but none of blackwater fever, and had been having chills and fever irregularly since the middle of June, and chills six, four, and two days before I saw her. She had taken 12 grains of quinine, 3 grains every three hours until 6 a. m. The onset occurred at 7 a. m., October 2, 1907, with a rigor, followed by black water at 9 a. m. I saw her for the first time at 5 p. m. Her temperature was 104½°. the pulse was 145; there was jaundice of skin and scleræ, and a systolic cardiac murmur which was not transmitted. Her liver was tender, and her spleen tender and palpable 1½ inches beyond the edge of the ribs.

The bowels were regular. She had vomited only once. She had pain in the head and epigastrium. The blood examination did not show parasites. The hemoglobin was 55 per cent, small mononuclear cells 19 per cent, large 32 per cent, polymorphonuclear cells 49 per cent. Her urine was almost black by reflected light, neutral, 1012; albumin 7 grammes to the liter; no sugar, bile, or quinine. Hemoglobin was present. The microscope showed amorphous detritus, few spindle and round epithelia, no casts or red cells. The treatment consisted of calcium chloride, 8 grains every two hours.

On October 3, 1907, at 9 a. m., the record showed that the patient had not slept during the night. Her pulse was 140; temperature 100.6°. Her urine was free, no clearer; icterus was much deeper; spleen no larger; small mononuclear cells were 5 per cent, large 56 per cent, polymorphonuclear cells 39 per cent. Strychnine and saline enemas were added to the treatment. At 4 p. m. her brother reported that she was resting much better; had vomited once; had passed only about 4 ounces of urine since 9 a. m. Two enemas had been given and retained. She had not so much fever as the day before; the bowels had not moved. Her urine was red, slightly acid, 1014. albumin 2.5 grammes to the liter; hemoglobin was present; no quinine. The microscope showed urates and amorphous detritus, few squamous and numerous round epithelia, few granular casts, no red cells. For treatment, calomel 4 grains, in two doses, an hour apart, was given.

On October 4, 1907, at 10 a. m., the temperature was 100.8°; the pulse was 165. The patient was semicomatose, talking at random, but could be roused and made to talk sensibly. Her urine was free and clear since the night before at 7, since when she had urinated four times. She was nauseated, vomited several times, once vomiting a greenish material; the bowels acted three times freely; the tongue was coated brownish-black and the skin was very pale, but not so yellow. Her urine was red, 1010, albumin 1.75 grammes to the liter. Hemoglobin was present, but no sugar, bile or quinine. The microscope showed urates and amorphous deposit; few spindle and numerous

round epithelia, very few granular casts, and no red cells. The treatment consisted in strychnine 1-90 grain, tincture of digitalis gtt. ij, every three hours, saline enemata every three hours, calcium chloride continued as at first. At 4 p. m. her father reported her resting better, drowsy, but not talking at random. The bowels acted twice. The patient had urinated three times since 10 a. m.

On October 5, 1907, at 11 a. m., the axillary temperature was 102.8°; her pulse was 150. She was comatose, and when disturbed answered with a groan. Her urine passed free and clear and the bowels acted twice. The patient died in a comatose state about noon.

Case 3.—W. W., white, female, aged twenty, teacher, had lived here eighteen years. Every member of her family has had blackwater fever some of them several times, a brother having died with it. She had typhoid fever in 1893 and has had frequent attacks of malaria, but none of hemoglobinuria. Three weeks ago she had a chill, and has had fever every other day for a week. She was given 15 grains of quinine three weeks ago; no more until the twenty-first day, when, beginning at 6:30, she took 3 grains every two hours for six doses. At 4:30 p. m., October 14, 1907, after having fever for several hours, her water became dark, although no rigor or chill occurred, and when I saw her at 5 p. m., her pulse was 100, temperature 101.6°. There was no jaundice, nausea, or vomiting; her bowels were loose, and she had pain in the head. An examination of the heart and spleen was negative. Her urine was port-wine in color, alkaline, 1016, albumin 4 grammes to the liter; there was no sugar or bile. Hemoglobin and quinine were present. Microscopic examination showed amorphous detritus, numerous epithelia, very numerous hyaline and granular casts. There were no blood cells. The blood examination, after a thirty-minute search, disclosed one small unpigmented ring, and one or two small pigmented bodies; small mononuclear cells were 7 per cent, large 25 per cent; polymorphonuclear cells were 68 per cent. The treatment consisted of calcium chloride 10 grains every three hours.

On October 15, 1907, at 9 a. m., the temperature was 98.6° ; the pulse was 96. The patient slept well, and vomited only once; urinated twice during the night. The urine began to clear in the morning. At 1:30 a. m. the temperature was $99\frac{1}{2}^{\circ}$; at 7:30, normal. There was slight jaundice of skin and scleræ. The spleen was slightly enlarged but not palpable. No parasites were found in the blood. The urine was yellow, slightly acid, 1016, albumin, 1-4 grammes to the liter. There was no bile or hemoglobin present, but a trace of quinine. The microscopic examination showed urates, a few squamous, round, and spindle epithelia; there were no casts or blood cells.

The urine remained free and clear and the temperature normal until October 17, when she was discharged.

Case 4.—B. C., white, male, aged 8. The patient had three uncles who had died with hemoglobinuria, and a sister had it a year ago. He had malaria every summer, but never had blackwater fever. Had several chills six weeks ago; one November 12, at 7 a. m.; and another November 13, 1907, at 1 p. m., followed soon by passage of black water. He was given a large dose of quinine the night before, one on the day following at 12, and another at 3. When first seen by me at 7 p. m. the temperature was $104\frac{1}{2}^{\circ}$, the pulse was 150, and respiration 40. He had been vomiting since 5 p. m. The bowels moved twice on the same day. There was pain in the head and stomach. The examination of the liver was negative. The spleen extended $2\frac{1}{2}$ inches beyond the costal margin. A cardiac systolic murmur was not transmitted. The urine was port-wine in color; the foam was red; neutral; the albumin was 14 grammes to the liter. Hemoglobin present, but no bile or quinine. Microscopic examination showed amorphous detritus, very few spindle and squamous epithelia, a moderate number of granular casts, and a few red blood-corpuscles. The blood examination showed no parasites; small mononuclear cells were 3 per cent, large 51 per cent; the polymorphonuclear cells were 56 per cent. The treatment consisted in calcium chloride grs. v and tincture of digitalis gtt. j, every three hours.

On November 14, 1907, at 3:30 p. m., the temperature was 104° ; the pulse was 158 and respiration 35. The spleen reached to umbilicus. There was decided jaundice of the skin and scleræ. The bowels moved twice during the day, and the patient urinated often during the night, and four times after 6 a. m., the urine in each instance being black. The last discharge was scanty. There was carphologia with mild delirium. He vomited only twice in the day. The hemoglobin was 40 per cent. The urine was port-wine in color, the foam was red; the urine was slightly acid, 1016; albumin 6 grammes to the liter. Hemoglobin was present, but no bile or quinine. The microscopic examination showed amorphous detritus, few spindle epithelia, moderate number of casts. Strychnine and saline enemata were added to the treatment.

The child died at 1 a. m., November 15, 1907, the kidneys acting until death. There were no convulsions.

A series of four cases is too small to permit of any exact conclusions as to results of treatment, but it would appear that I failed to derive the benefits claimed by Vineent for this method. The two fatal cases were in persons whose health was probably not more undermined from previous malaria or other causes than the average patient who is attacked with blackwater fever. It is worthy of note that the cause of death in both cases was not syncope nor suppression, but exhaustion due directly to hemolysis, the very process which calcium chloride is used to combat. In fact, in Case 2 there was unusually little damage to the kidney if the urinalyses may be admitted as evidence. No treatment other than supportive was used which might modify the antihemolytic effects of the calcium chloride, hence any of the results obtained may be attributed to the latter.

It is hoped these incomplete observations will not prevent a more extended use of this drug in the treatment of hemoglobinuric fever, as it is worthy of further trial—William H. Deadrick, M. D., in *Therapeutic Gazette*.

CHANCROIDAL BUBO AND ITS TREATMENT.

—Morton, of Brooklyn, advocates the following treatment, which was suggested to him by a visit to the Charite in Berlin: When a bubo first appears, an attempt should always be made to prevent suppuration by putting the patient to bed. The ice bag is no longer used, because it has been found that resolution will take place just as well with warm applications. Injection into the substance of the gland of antiseptic solutions has also been abandoned as useless. The bubo is covered with gauze, wet with 95 per cent. alcohol, and with cotton wadding and perforated gutta percha tissue to prevent too rapid evaporation. The alcohol is renewed twice a day as it evaporates. Another method is fomentation with solution of ammonium acetate used warm and frequently renewed. Tincture of iodine has little or no value as an absorbent. After fluctuation has begun the warm applications should be changed for hot ones, to encourage rapid breaking down of the glands. The thermolyte bags are useful, as they can be used with the hot fomentations and serve to retain the heat for a long time. After the bubo is thoroughly broken down and full of pus, a small incision is made with a double-edged knife and the pus evacuated. A 10 per cent. iodoform glycerin emulsion is then injected into the wound. The injection is made three times at the first sitting, the first two injections being allowed to run out and the last one retained. The wound is then bandaged over night with fomentations of solution of ammonium acetate. On the following day the bubo is emptied by squeezing out and the injection is again made. The wound is then bandaged and left undisturbed for five or six days. At the end of that time, in the great majority of cases the bubo is healed and the patient requires no further treatment.—N. Y. Medical Journal.

BLOOD PRESSURE IN TUBERCULOSIS.—Strandgaard (*Hospitalistidende, Copenhagen*), reviews the literature on this subject and gives the findings in regard to the blood pressure of hundreds of patients at the Boserup sanatorium. The findings the first and the last day of their stay in the sanatorium are tabulated for comparison. His conclusions are that the more pro-

nounced and advanced the tuberculosis, the lower the blood pressure, as a rule. A low blood pressure may help to differentiate tuberculosis in dubious cases, and show whether a tuberculous process is active or latent. Determination of the blood pressure may also direct attention to some complication elsewhere, such as nephritis or heart disease. It may also prove useful for the prognosis. In 174 adults and 163 children cured or materially improved, the average pressure was 125, while it was only 121 in 234 patients only moderately or not at all improved, and it averaged 108 in 21 adults and 13 children whose disease continued a progressive course, and in 17 patients who succumbed. In each group there was a wide range of the blood pressure in individual cases, but the general average showed a drop from 125 to 108 between the first and last group. The discovery of unusually high blood pressure suggest the imminence of hemoptysis, and treatment should be instituted to reduce the pressure. The partial dependence of the blood pressure on the conditions in regard to the nourishment confirms the importance of superalimentation. Repeated determination of the blood pressure will also prove a guide as to pushing and continuing superalimentation. The indications to be learned from the blood pressure will be much more exact and instructive, he adds, when our present defective technic is perfected, and when we know more about the physiologic blood pressure. It is not a constant element, like the body temperature, but varies, like the height, weight, etc. A somewhat low blood pressure in one individual may be the physiologic optimum in another. It is impossible at present to say whether the low blood pressure in tuberculosis is primary or secondary, but its rising or falling with healing or progressive lesions suggests that it is secondary. A better oversight might be obtained from the "pulse pressure," as the difference between the extremes of pressure is called, instead of estimating the maximal pressure only.—Journal A. M. A.

TREATMENT OF ABSCESS OF THE BREAST BY INJECTIONS OF COLLOIDAL SILVER. J. L. Cherie and C. David (*Bull. de la Soc. d'Obst. de Paris, Dec. 19, 1906*) says that the method

of treatment of abscess of the breast by aspiration and injection of electric colloidal silver in isotonic solution, has been used in a number of cases with great success, the patient being cured in a short time, without any cicatrix and with a breast exactly like the healthy one. After using the solution in a few cases after incision of the abscess, the authors determined to try injection without incision. The treatment is not given until an abscess has been formed. It may be used in an abscess of any location and produced by the action of any germ, superficial or deep. The colloidal silver is produced by electricity and has the advantage of being perfectly pure. It is reduced to an isotonic solution and gives no pain or inconvenience to the patient. A trocar is inserted into the abscess cavity, the pus is drawn off, a solution of silver is injected and drawn off again several times to wash out the cavity, and then more is forced in and allowed to stay in the cavity. The trocar is furnished with a small faucet and is allowed to remain in the cavity for use at the next treatment. The injections should be given two or three times per day. The pus immediately becomes less, and changes its consistency, becoming yellow and more fluid, and all germs disappear from it. The injections should be continued several days after the germs disappear. A thin brownish liquid flows out for some days until the cavity is filled up.—American Journal of Obstetrics.

RICKETS AND SYPHILIS.—Marfan (*Semaine Medicale, Paris Oct. 2, XXVII, No. 40, pp. 469-480*) warns that a syphilitic origin for rachitis is more than probable when this condition develops during the first three or four months of life, and affects the skull predominantly, with anemia and enlargement of the spleen. Syphilis, he asserts, will be found in the antecedents in two out of every three cases of this kind. Rachitis of alimentary origin does not appear until after the sixth month; it affects the legs more than the skull; anemia is less pronounced, and the spleen is seldom enlarged while digestive disturbances and big belly are frequently encountered.—J. A. M. A., Nov. 2, '07.

PLACENTAL RETENTION AFTER ABORTION.—A. Bonnet-Labordiere (*Jour. des Sci. Med. de Lille, August 17, 1907*) divides the treatment of abortions in which it is impossible to ascertain positively whether the placenta and membranes have been entirely removed, into two heads, expectant treatment, and immediate operative treatment. Some accoucheurs, among whom is Tarnier, believe that by awaiting the evolution of nature the case may be finished without submitting the patient to a disagreeable operation. Others believe that such waiting exposes the patient to the great dangers of hemorrhage and infection. If a waiting policy is to be carried out, the patient should be in a hospital under constant supervision. She must also remain in bed for some time. Therefore the operative policy has many advocates. In many cases it is impossible to tell absolutely whether the whole secundaries have been removed. The use of the curette will not decide the matter, since it is possible for a cotyledon of the placenta to remain hidden in a horn of the uterus. Again the curette may so mutilate the placenta and open the uterine vessels by tearing the mucous membrane that infection is rendered easy. Severe hemorrhage may also follow curetting. The author inclines to the belief that the immediate removal of the placenta is the best policy.—American Journal Obstetrics.

Communications

WHO IS THE AUTHOR OF THE DANIEL BILL?

Little Rock, Arkansas, February, 1908.

To the Editor:

I am in receipt of a circular letter written by Dr. J. P. Runyan, of this city, in which the claim is made that Hon. Hal L. Norwood, of Mena, candidate for Attorney General, was the "real author" of the Daniel medical bill. I have been under the impression, that the bill which was enacted into a law, originated with the Committee on Medical Legislation of the Arkansas Medical Society, and that the credit of authorship belongs to Dr. Isaac J. Newton, formerly of Little Rock, but now of Monroe,

La. Will you please furnish me and the readers of the Journal, the facts upon which the statement is made by Dr. Runyan, that "Norwood was its real author?" Credit should be given to whom credit is due.

Yours truly,

"MEDICUS."

The desired information has been very kindly furnished by Dr. Newton to whom the contents of the above communication were referred, and as his reply thereto is a matter of general interest to the members of the Arkansas Medical Society, no apology is offered for its publication.

DR. NEWTON'S REPLY.

To the Editor:

Your letter of recent date inclosing a circular letter written by Dr. J. P. Runyan, a copy of a letter from a member of the Arkansas Medical Society who desires to know the author of the Daniel Bill, and your request for this information for publication in the Journal, has been received and its contents carefully noted.

I regret that political exigencies in your State should at this late date deem it necessary to establish the true paternity of the so-called Daniel medical bill, but Dr. Runyan's letter positively naming Hal L. Norwood as its author, makes pertinent the questions asked by your correspondent, and I desire to thank you for having given me the opportunity to at least extricate myself from what now appears a false position before the members of the Arkansas Medical Society.

Doctor Runyan's letter states that "Norwood was its real author." In your letter you state that "many members of the profession in Arkansas were laboring under the impression that I was entitled to that honor, if honor it be, and that if not, I had been enjoying an honor due to another," and as it seems that none of the other members of the State Society, who are cognizant of the actual and true conditions that originated and gave passage to the medical bill, are disposed to give the desired information. I feel it incumbent upon myself to furnish you with the facts about the matter.

That I have not heretofore given publicity to any statements properly establishing the medical bill, as the child of the Arkansas Medical Society, and not of Doctor Daniel's fertile brain, is due first, to an innate modesty that forbade; secondly, that I felt it a duty due to me as well as to the State Medical Society that others *who knew the truth, should establish the facts.*

In the beginning I wish to state and emphasize the fact, that the members of the medical profession of the State of Arkansas are under lasting obligations to the Hon. Hal L. Norwood, not only for his support in the Senate of the medical bill, but for aid and work in the preparation of the bill, prior to its introduction into the House of Representatives, as will be shown in my statements later on. The bill could not have been enacted into law, at the time it was, but for Mr. Norwood's influence and work both in the Senate and House.

The medical bill generally known as the Daniel bill, because it was introduced by Doctor Daniel in the House of Representatives, was a bill emanating from the Committee on Medical Legislation of the Arkansas Medical Society under the following circumstances:

The death of Dr. Jelks, of Hot Springs, caused a vacancy on the Committee on Legislation of the Arkansas Medical Society and the president, Dr. C. R. Shinault, appointed me to the vacant position. This change in the personnel of the Committee necessitated a reassembling of the Committee to agree upon plans for work. This Committee soon thereafter met in Little Rock at the office of Dr. E. R. Dibrell, at the same time that the Councilors were in session, and informally, the two committees discussed the matter of a medical bill to be prepared and presented at the next session of the Legislature. One or more bills prepared by individuals were presented, many suggestions made, and I presented a synopsis of a bill that I thought would prove acceptable to both the people and the medical profession. After some deliberation the Committee on Medical Legislation went into executive session and I was chosen to prepare a bill to be presented to the Legislature. This appointment of special privi-

lege was accorded to me from the fact that the synopsis of the bill that I had suggested was much in line with the then existing law of Louisiana, regulating the practice of medicine, of which law, I was the author of the bill as accepted by the Committee on Medical Legislation and introduced into the House of Representatives by a friendly member.

In preparing the bill to be presented to the Arkansas General Assembly, I found it necessary to be informed upon some legal measures with which I was not familiar, being "neither a lawyer nor the son of a lawyer." Having first conferred with the president of the State Society, Dr. C. R. Shinault, and by his request, I applied to Hon. Hal L. Norwood for his aid and counsel in preparing the bill and to take charge of it in its introduction and course through the Legislature. To this demand he of course generously and cheerfully responded, and declined to charge me any fee other than the necessary stenographer's and type-writer's expense incident to the work.

At the request of Mr. Norwood I supplied him with the sections of the proposed bill that he might arrange same into the proper legal form for presentation as "An Act, etc.," to be presented to the Senate. Owing to frequent interruptions and delays, he was unable to deliver to me the bill as he prepared it, until shortly before the time for the opening of the session of the Legislature. After examining the bill that he had sent, I found that he had in several ways so altered the original text as I had prepared it, that I wrote him stating that it was not satisfactory and therefore could not accept it. The principal change that he had made being from three Boards into one Board, allowing representation from the several schools of medicine.

Mr. Norwood then wrote me and we arranged to meet at Gleason's hotel to reconsider the matter and to correct the errors in his bill. This meeting took place after the Legislature had opened its session. At this conference I presented the bill that I had prepared, in separate sections. After going over these, he suggested some changes, principally in verbiage, after which he and I, by sitting up all night, got the

bill ready for his use the next day in the Senate. The bill, as you can see by comparison, is practically a copy of the main features in the Louisiana medical law.

To be more concise, the mutual attitude of Mr. Norwood and myself relative to the bill is simply this: I prepared and gave him the items and requirements that I wanted incorporated into a law; he arranged, assorted and clothed them in that phraseology which characterizes all bills to be enacted into law.

Just here, I wish again to emphasize Mr. Norwood's unselfish and untiring work and interest in said bill, and to assert that he is more than entitled to a mere feeling of ordinary appreciation and gratitude. Except those directly engaged in the intricacies of the fight that was made on this bill none can but poorly surmise the almost insurmountable difficulties that had to be overcome, and in all this, Mr. Norwood stood ever ready, not only in advising, but in the actual work necessary to accomplish our demands.

Believing the foregoing will suffice to explain the conditions surrounding the origination of the bill in question I desire to comment briefly upon its subsequent course and termination. This bill was first introduced into the Senate by Hal L. Norwood, I think the day before the Daniel bill was launched into the House. In fact it was pushed for the Senate in order to anticipate a bill that had been reported in possession of Doctor Daniel. Through Doctors Park, Vale and other Eclectic physicians of Little Rock who were favorable to the bill that I was having Mr. Norwood present in the Senate, I arranged a conference with Dr. Daniel with the view to reconciling in some way, the two bills about to be brought before the Senate and House. This conference between Doctor Daniel and myself took place in the office of Dr. Park, in Little Rock, and there were present at this meeting and participating in the deliberations thereof, Doctors J. P. Runyan, W. H. Hughes, Park, Vale and several others. By request, I was permitted at this meeting to first present the bill as prepared for the Senate, and it was read and discussed section by section. Upon finishing the reading of this bill, Dr.

Daniel said that it was so pre-eminently fair both to the people and the medical profession. that if permitted to do so he would take the bill and introduce it in the House in lieu of the one that he had prepared for said purpose. After a consultation with Mr. Norwood, he advised the acceptance of this offer of Dr. Daniel's and decided to hold the bill identically the same, that he had introduced to its first reading in the Senate, and await the fate of the bill introduced in the House, as it was there we apprehended the greatest trouble in its passage. I then delivered to Dr. Daniel a copy of the Senate bill, which he the next day introduced in the House and it was subsequently enacted into a law.

I must beg pardon for having somewhat, *in extenso*, gone into details concerning the medical bill, yet without having done so, with full statement of facts, possibly the conditions surrounding the origin of the bill and its course through the Legislature might again become a subject of inquiry and doubt. My own estimation of the situation is: That the bill was the result of the persistent work and determination upon the part of the Arkansas Medical Society to better the conditions existing relative to the practice of medicine, and to advance somewhat in higher medical education in the requirements by law of those applying for permission to practice in Arkansas. The committee on Medical Legislation was but an exponent of the State Society, and I only an exponent of this Committee delegated to do a special work, which should be accepted, not as any personal honor to me, other than duty performed, but stand as the work of the Committee as a whole. Mr. Norwood's position was as a legal adviser in preparation of the bill and the promoter and protector of its interests after it left our hands for its fate with the Legislature.

Doctor Daniel's position was nothing more than the courteous means of having the bill introduced in the House, save as to what his personal and official influence was worth in securing its passage. I trust that the foregoing will meet the necessities of your inquiries, and that it will set at rest, without prejudice to any one,

any questions having arisen by Doctor Runyan's circular letter, in which he no doubt inadvertently failed to properly estimate the full meaning of his statements.

Yours very truly,

I. J. Newton, M. D.

Monroe, La.

Philadelphia, February, 3, 1908.

To the Editor Journal Arkansas Medical Society:

Dear Sir:—As you know, the United States Pharmacopoeia (8th Rev.) was made the standard for drugs and medicines by the passage of the National Food and Drugs Act, June 30th, 1906. Since then the manufacturing chemists, pharmacists and wholesale and retail druggists have been endeavoring to comply with the law. The fact remains, however, that many members of the medical profession are not actively supporting the movement throughout the country for the more extended use of the United States Pharmacopoeia and National Formulary preparations. It was believed that the professors and instructors, in the medical schools throughout the country, could very materially aid in the movement, by giving to their students *special lectures* on Pharmacopoeial and National Formulary preparations, illustrating them by showing actual specimens and requiring them to study their physical and medical properties.

Will you kindly find space in your valuable journal for the following resolution, which will undoubtedly, meet with approbation from the professors and instructors in most of the Medical Schools throughout the United States.

Very truly yours,

Joseph P. Remington.

SUCCESSFUL APPLICANTS.—At the last examination of applicants for license to practice medicine and surgery in Arkansas, which was held on Jan. 14th, by the State Medical Board of the Arkansas Medical Society, the following 24 applicants were successful and were granted license: G. A. Altman, Helena, Ark.; W. F. Ament, St. Louis, Mo.; L. K. Ament, St. Louis, Mo.; E. P. Bledsoe, Little Rock, Ark.; J. B. Blue, Parkin, Ark.; A. D. Craig, Fourche, Ark.; C. H. Cullers, St. Louis, Mo.; S. W. Douglas,

Grapevine, Ark.; A. Garrison, St. Louis Mo.; W. P. Hicks, Parkin, Ark.; E. E. Holt, St. Louis, Mo.; C. M. Harwell, Osceola, Ark.; H. O. Lewis, St. Louis, Mo.; J. C. Lyels, Memphis, Tenn.; J. R. May, Little Rock, Ark.; E. L. Mathews, Little Rock, Ark.; J. P. Nelson, Howell, Ark.; W. G. Pittman, Pine Grove, Ark.; F. C. Rowell, Little Rock, Ark.; F. D. Rowell, Hot Springs, Ark.; L. C. Steele, St. Louis, Mo.; H. F. Thompson, Little Rock, Ark.; C. M. Wassell, Little Rock, Ark.; J. D. Whitely, Petersburg, Ill.

District and County Societies

GREENE COUNTY.—At the last meeting of the Greene County Medical Society, the following were elected officers for the ensuing year:—President, M. C. Graham, M. D., Gainesville; First Vice-President, F. M. Scott, M. D., Paragould; Second Vice-President, E. L. Kennedy, M. D., Marmaduke; Secretary-Treasurer, Olive Wilson, M. D., Paragould; Board of Censors, Drs. W. R. Owens, H. M. Dickson, and G. T. Hopkins.

BENTON COUNTY.—The new officers of the Benton County Medical Society elected at the January meeting, are as follows:—President, J. L. Clemmer, M. D., Springtown; Vice-President, E. E. Pickens, M. D., Rogers; Secretary-Treasurer, J. H. Beard, Gentry. Dr. Chas. H. Cargile, of Bentonville, was elected a member of the Board of Censors for three years.

Dr. J. W. Webster, of Siloam Springs, was elected delegate to the Arkansas Medical Society; Dr. J. H. Beard, of Gentry, Alternate.

CRAIGHEAD COUNTY.—The Craighead County Medical Society will meet at Jonesboro, March 12th. Dr. B. L. Harrison will read a paper on "The Varieties of Pleurisy;" Dr. Waddell on "Characteristic Symptoms and Physical Signs of Pleurisy;" "The Usual Causes of Pleurisy, Their Manner and Production," by Dr. Rains; "Changes in the Air-Cells and Bronchi in Pleurisy," by Dr. Ratliff; "Gangrene of the Lungs, the Most Prominent Factors, Diagnostic Symptoms, Causes and Terminations," by Dr. Stroud; "Abscess of Lungs, Local Conditions in

Pyemia," by Dr. Haltom; "Treatment," by Drs. Jackson, Pelton and Burns.

SEBASTIAN COUNTY.—At the January meeting of the Sebastian County Medical Society, Dr. H. Moulton, President; Dr. Omelvena, Vice-President; Dr. Chas. S. Holt, Secretary, and Dr. J. A. Foltz, Treasurer. Dr. St. Cloud Cooper, of Fort Smith, was elected to membership on the Board of Censors.

JOHNSON COUNTY.—The Johnson County Medical Society met at Clarksville. February 3rd, with Dr. W. R. Hunt, President, in the chair. Those present were: Drs. L. A. Cook, Secretary; C. S. Allen, T. E. Burgess, J. S. Kolb, Jr., L. Stewart, and J. R. Horner. The program was as follows:

"Clinical Cases," by Dr. Stewart.

"The Treatment of La Grippe, Its Complications and Sequelæ," by Dr. Cook; discussed by Dr. Stewart.

Dr. Allen was appointed to read a paper at the next meeting on "Meningitis."

MISSISSIPPI COUNTY.—The next session of the Mississippi County Medical Society, will be held at Luxora, February 18th. The program for the meeting s as follows:

"Pathology of Pneumonia," by Dr. Nall.

"Metritis, Its Relation to Peritonitis and Its Prevention," by Dr. Prewitt.

"Microscopy," by Dr. Crawford.

"Some Causes of Ascites," by Dr. Frank A. Jones, Memphis, Tenn.

"Penetrating Wounds of the Abdomen," by Dr. Battle Malone, Memphis, Tenn.

The society begins the new year with bright prospects, so writes the secretary, Dr. Brewer, and a successful year's work is assured judging from the interest manifested by the loyal membership.

A NEW METHOD OF TESTING THE FUNCTIONS OF THE DIGESTIVE APPARATUS.

Einhorn (Therapeutic Gazette, January, 1908) submits a method for investigating the functions of the intestinal tract, the principal observation of the effects of the digestive fluids upon these substances.

Practically this test is made as follows: Patients are given in a gelatin capsule a string of beads with the following substances attached thereto: catgut, fish-bone, meat, thymus, potato, mutton fat. After administering the capsule, every stool

is examined with the stool-sieve until the bead-string has been recovered. If diarrhea is present, the sifting may not be necessary, as the bead-string can readily be seen (usually at the bottom of a glass vessel.)

Under normal conditions the bead-string appears after one or two days. It is then rinsed in cold water and examined. If digestion is normal we find that catgut, meat, and potato (except the skin) disappear entirely, thymus and fat almost entirely, whereas the fish-bone usually disappears, but occasionally it may be present. The nuclei of the thymus always disappear. In pathological conditions deviations from the normal are observed, not only in regard to the time of recovery of the beads (disturbances of motility), but also in regard to the presence of the food substances (disturbances of the digestive function).

The author divides his cases of intestinal digestive disturbances into two groups:

1. Those of pure nervous intestinal dyspepsia.
2. Those of genuine intestinal dyspepsia.

In that great class of cases of intestinal dyspepsia, in which the starch digestion alone is disturbed, Taka-Diastase (Takamine) has proved of especial value.

QUESTIONS ASKED ON EXAMINATION
BY THE STATE MEDICAL BOARD
OF THE ARKANSAS MEDICAL
SOCIETY, AT LITTLE ROCK,
JANUARY 14, 1908.

CHEMISTRY.

By Dr. J. C. Wallis, Arkadelphia.

1. What is oxygen and how prepared?
2. Define sp. gravity and give methods of determining?
3. What is sulphur, its source, properties and when found in human body?
4. What is formaldehyde, how prepared and for what used?
5. Give two tests for albumen in urine.
6. Give chemistry of respiration.
7. Give chemical composition of milk.
8. What is glycogen?
9. What alkaloids found in tea, coffee and coco-cola?
10. Complete the following equation: $\text{NH}_4\text{OH} + \text{HCL} = ?$

OBSTETRICS.

Dr. M. Fink, Helena, Ark.

1. Give the etiology of post-partum and ante-partum hemorrhage and treatment of each?

2. In a breech presentation what if any are the dangers to mother and child?

3. What are the indications for the use of forceps and the rules for applying them?

4. Give the symptoms and treatment of albuminuria of pregnancy and treatment of eclampsia?

5. Give diagnosis and treatment in case of death of foetus during the later months of pregnancy?

6. Give the causes and best means of prevention and treatment of puerperal infection?

7. Are there any objections to the use of ergot during labor, if so state them? At what time is its use most beneficial during parturition?

8. Give the names of the external and internal female organs of generation and describe fully the uterus?

9. How long would you remain after the delivery of a woman in confinement? What symptoms would make you delay your departure?

10. What is the perineum and how should it be protected?

SURGERY.

By Geo. S. Brown, M. D., Conway.

1. Give a classification of tumors conforming to the type of embryonic connective tissue.
2. Name three micro-organisms which may cause conditions requiring surgical interference.
3. Name the varieties of hemorrhoids, and describe elective operations for each.
4. What is a sprain and what tissues are involved? What dressing would you apply to a sprained ankle?
5. Describe Pott's fracture; also Colles' fracture and give treatment of the latter.
6. Give the symptoms of a backward luxation of the forearm and method of reduction.
7. Describe Bassini's operation for the radical cure of inguinal hernia.
8. Give the causes of retention of urine.
9. What are the characteristics of the initial lesions of syphilis? Mention the common syphilitic lesions of the nervous system.
10. What is empyema? Give diagnosis, prognosis and treatment.

PRACTICE.

By Dr. M. L. Norwood, Lockesburg.

1. Whooping cough. Give diagnosis and treatment.
2. *Ascaris lumbricoides*. Describe. Give symptoms and treatment.
3. Rickets. Give causes, symptoms and treatment.
4. Describe the algid form of pernicious malarial fever and give treatment.
5. Describe a case of acute general peritonitis and give treatment.
6. Give causes, symptoms and treatment of arterio-sclerosis.
7. Give symptoms and treatment of chlorosis.
8. Give clinical and laboratory signs of chronic interstitial nephritis.
9. How would you treat a pulmonary hemorrhage?
10. Give diagnosis and treatment of locomotor ataxia.

MATERIA MEDICA.

By Dr. Murphy, Brinkley.

1. Differentiate the meaning of materia medica and therapeutics.
2. Define diuretic, name two and describe action of each.
3. Name two principal methods by which antipyretics act.
4. Name four medicinal agents which are tonic in their action and give dose of each.
5. Name two classes of emetics and describe action of each class.
6. How many alkaloids does opium contain? Name three of the most used and give dose of each.
7. What is diphtheria antitoxin? Give dose and mode of its administration both for its immunizing as well as its curative effects.
8. From what is salicine obtained? Give dose and indications for its use.
9. Write a prescription for hyperacidity of the stomach due to excessive secretion of hydrochloric acid.
10. What disease so closely resembles strichnine poisoning? Name differential points of diagnosis.

PHYSIOLOGY.

By Dr. Poynor.

1. What is physiology?
2. Name process of digestion.
3. Name functions of liver, spleen and pancreas.
4. Give nerves of five special senses.
5. What changes take place in blood during respiration?

ANATOMY.

By Dr. MacCammon.

1. At what time in development of foetus is uterus formed?
2. Describe radius, naming muscles attached thereto.
3. Describe the deltoid muscle.
4. Give nerve and blood supply of above named muscle.
5. Name branch of abdominal aorta.
6. Describe the common bile-duct.
7. Describe the coats of the stomach.
8. Describe structure of the spinal cord.
9. Give structure of tongue.
10. Name anatomical structures of common house fly that have to do with the transmission of disease.

Change of Address

Dr. J. W. Thorn, from Clio to Warren.

Dr. O. E. Pucket, from Fitzhugh, Ark., to Terral, Okla.

Dr. H. H. Canfield, from Siloam Springs, to Seattle, Wash.

Dr. Orpheus York, of Alco, has moved to Panhandle, Texas.

An abscess of the right ovary may give the same signs and symptoms as acute fulminating appendicitis. If an incision for appendicectomy is made, it should be of sufficient length and low enough down to allow of careful examination of the right adnexa.—American Journal of Surgery.

POSTGRADUATE COURSE OF STUDY FOR COUNTY MEDICAL SOCIETIES.

Arranged by John H. Blackburn, M. D.,
Bowling Green, Ky.

FOURTH MONTH.

DISEASES OF THE LUNGS.

First Weekly Meeting.

Lungs: Gross and Microscopical Anatomy...
Blood Supply, Functional and Nutritional;
Nerves and Lymphatics.....
Physiology of Respiration
Normal Physical Diagnosis

Second Weekly Meeting.

Bronchitis, Acute: Pathology and Symptoms
.....
Bronchitis, Chronic: Pathology and Sym-
ptoms
Congestion of Lungs: Hemoptysis

Third Weekly Meeting.

Pneumonia, Lobar and Lobular.

1. Differentiate Etiology, Bacteriology ..
2. Differentiate Pathology
3. Differentiate Symptoms and Physical
Signs

Fourth Weekly Meeting.

Pleurisy: Varieties, Etiology, Pathology
Emphysema
Gangrene or Lung
Abscess of Lung

Monthly Meeting.

Treatment of Pneumonia
Physiologic and Therapeutic Action.

1. Cardiac Depressants.
2. Cardiac Stimulants.
3. Expectorants.

Hemoptysis
Pleurisy (Plastic): Diagnosis and Treat-
ment

FIRST WEEKLY MEETING.

ANATOMY.

Demonstrate Fresh Specimen.

Trachea: Length, diameter boundaries and
important relations.

Bronchi, Right and Left: Location and sur-
face markings. Difference between two. Divis-
ions of bronchi to terminations.

Microscopic Anatomy: Exhibit microscopic
sections. Trachea and bronchi. Difference in
structure of larger and smallest tubes.

Tracheal Glands: Location, gross and micro-
scopic structure. Drain into what?

Blood Supply: Of trachea and bronchi.

Nerve Supply: Nerves supplying trachea and
bronchi. Origin of each.

Pleura: Pleura and its reflections.

Mediastinum: Divisions and important con-
tents of each.

Lungs: Size, shape, weight, color, etc. Dif-
ferences between right and left. Relations of
structures entering root of lung. Histologic
structure. Differentiate functional and nutri-
tional blood supply.

PHYSIOLOGY OF RESPIRATION.

Theories of respiration. Errors of each.
Normal position of thorax.

Inspiration and expiration, (a) active and
(b) passive.

Mechanism of (a) inspiration, (b) expira-
tion.

Types of breathing.

Vital capacity. Tidal air. Complemental
air. Supplemental air. Residual air. Intra-
pulmonic and intrathoracic pressure. Effect
on circulation.

Differences, physical and chemical, in in-
spired and expired air.

Changes in blood during passage through
lung.

Respiratory center. Location. Automaticity.
How stimulated reflexly.

NORMAL PHYSICAL DIAGNOSIS.

Outline regions of chest, locating different
organs by surface markings. Demonstrate meth-
ods of examination, inspection, palpitation, per-
cussion and auscultation on normal chest.

SECOND WEEKLY MEETING.

BRONCHITIS.

Acute Bronchitis.

Etiology. Most frequent cause. "Inhalation"
bronchitis. Associated with what acute infec-
tious diseases? Micro-organisms most frequent-
ly found on mucous membrane.

Pathologic anatomy. Changes in mucous membrane. Character of exudate. How do etiologic factors influence pathologic changes and exudate?

Symptoms: Initial symptoms and course. Most frequent complications. Symptoms and signs of onset.

Physical Signs: Physical signs of different stages with relation to changes in mucosa.

Prognosis: On what does termination depend? Influence of age on course.

Diagnosis: With what disease may it be confused? Give points of difference.

Differential diagnosis.

Chronic Bronchitis.

Etiology. After what diseases does acute form become chronic? Associated with what constitutional diseases. Bearing of climate and season.

Pathologic Anatomy: Changes in different forms.

Symptoms: Age, symptoms and physical signs. Shape of chest.

Clinical varieties: (a) Bronchorrhea, (b) putrid bronchitis, (c) dry catarrh, diagnostic symptoms and signs of each.

CONGESTION OF LUNGS.

Active—Occurs in what conditions. Pathology. Symptoms. Differential diagnosis.

Passive—Mechanical. Usual cause. Pathology. Symptoms.

Hypostatic—Occurs in what class of cases. Factors in production. Pathology. Diagnosis.

HEMOPTYSIS.

Causes. Significance. Mode of onset. Physical characteristics of blood. Course. Recurrence as a symptom.

THIRD WEEKLY MEETING.

PNEUMONIA.

Croupous Pneumonia.

Etiology: Influence of age, occupation, habits, previous diseases, climate and season.

Specific microorganisms and causal relations. Found in what other regions of body. Morphology and methods of culture.

Pathologic Anatomy; Changes occurring in (a) engorgement, (b) red hepatization, (c) gray hepatization, (d) resolution, Changes in bronchi and pleura. Changes in other organs of body.

Symptoms: Clinical course of typical lobar pneumonia, ending in recovery. Symptoms of (a) respiratory system with physical signs, (b) circulatory system, (c) nervous system.

Catarrhal Pneumonia.

Etiology: Age. Following what disease? Occurrence in old age. Aspiration pneumonia. Occurs under what conditions?

Pathologic Anatomy: Characteristic changes, gross and microscopic, in lung. Wherein do they differ from croupous pneumonia? Difference in distribution of consolidated areas. Organisms found in catarrhal pneumonia.

Symptoms: After an infectious disease what would lead to diagnosis of catarrhal pneumonia? Usual physical signs. Difference in onset and symptoms between catarrhal and croupous pneumonia.

Differentiate physical signs.

FOURTH WEEKLY MEETING.

PLEURISY.

Varieties.

Acute and Chronic. Acute plastic, sero-fibrinous, purulent, tuberculous, hemorrhagic. Chronic adhesive.

Etiology.

Acute Plastic: Primary—Age, sex, cold, injury, diathesis. Secondary—Acute and chronic inflammations of lungs, pneumonias, tuberculosis, acute rheumatism, nephritis, hepatitis, alcoholism, by extension through lymphatics.

Sero-fibrinous: After acute plastic, tuberculosis, primarily and secondarily, infectious diseases.

Purulent: Secondary to sero-fibrinous, after infectious diseases, malignancy, tuberculosis, through lymphatics, injuries, in children.

Hemorrhagic: Tuberculosis, carcinoma, chronic nephritis, hepatic cirrhosis, malignant infections.

Chronic with Effusion: After acute variety.

Chronic Adhesive: After sero-fibrinous, idiopathic.

Pathology.

Acute Plastic: Extent of lesion, surface, blood vessels, exudate, adhesions, terminations.

Sero fibrinous: Extent of, involvement, fibrinous exudate, character and amount, serous exudate, physical, chemical and microscopic characters, location of exudate, changes in pleuræ.

Coincident pathology, mediastinum, lungs, heart, abdominal viscera.

Purulent: Character of exudate, pleuræ, microscopic and gross changes.

Hemorrhagic: Physical and microscopic character of exudate, changes in pleuræ.

EMPHYSEMA.

Compensatory Emphysema: Usual causes. Manner of its production.

Hypertrophic Emphysema: Etiology. Theories as to causation. Bearing of heredity.

Pathologic Anatomy: Changes in air cells. in bronchi.

Symptoms: Characteristic symptoms. Physical signs.

GANGRENE OF LUNG.

Etiology: Most prominent causative factors. Pathologic anatomy. Mechanism of production. Pathologic changes. Symptoms. General symptoms. Diagnostic symptoms. Course and termination.

ABSCESS OF LUNG.

Etiology: Local conditions. Manner of production in pyemia.

Deaths

Dr. J. M. Jones, an honored member of the Jackson County Medical Society, died at Newport, February 13, 1908, from pneumonia complicated by meningitis. Just one week prior to his death, his wife died of pneumonia. Dr. Jones had resided in Newport 31 years, and was one of the best known physicians in north-east Arkansas. His burial was conducted by Masors.

If the periosteum strips back easily from a bone and if at the same time a subperiosteal abscess is found, it is positive evidence of some infection within the bone itself.—American Journal of Surgery.

General News

DISEASES OF GREAT PHYSICIANS.

Sir Benjamin Brodie, the great surgeon, died of cancer of the right shoulder.

Dupuytren died of empyema. He refused to be operated upon, saying that he would rather God would end him than the surgeon.

Mikulicz died from cancer of the stomach, a disease upon which he had brilliantly written.

Sir James Y. Simpson, Sir Charles Bell and John Hunter died of angina pectoris.

Dr. Richard Bright, the great English physician, died of arterio-sclerosis.

Dr. Robert Liston died of an aneurism of the aorta.

MISSOURI VALLEY MEDICAL SOCIETY.—The Twentieth Semi-Annal meeting of the Missouri Valley Medical Society will be held at Lincoln, Nebraska, March 19, 20, under the presidency of Dr. W. F. Milroy, of Omaha. Dr. Charles Wood Fassett, of St. Joseph, Missouri, is the secretary.

THE HODGKINS FUND PRIZE.—In October, 1891, Thomas George Hodgkins, Esquire, of Setauket, New York, made a donation to the Smithsonian Institution. the income from a part of which was to be devoted to "the increase and diffusion of more exact knowledge in regard to the nature and properties of atmospheric air in connection with the welfare of man."

In the furtherance of the doner's wishes, the Smithsonian Institution has from time to time offered prizes, awarded medals, made grants for investigations, and issued publications.

In connection with the approaching International Congress on Tuberculosis, which will be held in Washington, September 21, to October 12, 1908, a prize of \$1,500 is offered for the best treatise that may be submitted to that Congress "On the Relation of Atmospheric Air to Tuberculosis."

The treatise may be written in English, French, German, Spanish or Italian. They will be examined and the prize awarded by a Committee appointed by the Secretary of the Smithsonian Institution in conjunction with the officers of the International Congress on Tuberculosis.

The right is reserved to award no prize if in the judgment of the Committee no contribution is offered of sufficient merit to warrant such action.

The Smithsonian Institution reserves the right to publish the treatise to which the prize is awarded.

Further information, if desired by persons intending to become competitors, will be furnished on application to Charles D. Walcott, Secretary, Smithsonian Institution.

The United States Civil Service Commission announces an examination on March 4, 1908, at the places mentioned in the list printed hereon, to secure eligibles from which to make certification to fill a vacancy in the position of acting assistant surgeon. Public Health and Marine-Hospital Service, for duty at St. John's River Quarantine Station, Mayport, Fla., at \$125 per month, and vacancies requiring similar qualifications as they may occur.

For the specific vacancy mentioned applicants must be expert in the diagnosis and treatment of yellow fever, and persons who are immune to that disease are preferred. Examinations will be held at Texarkana, Fort Smith and Little Rock.

At an informal conference, called by Prof. Joseph P. Remington, of the teachers named below in the medical schools of Philadelphia, the following resolution was passed:

"Resolved, that it is of the utmost importance for accuracy in prescribing, and in the treatment of disease, that students of Medicine be instructed fully as to those portions of the United States Pharmacopoeia which are of value to the practitioner, and that members of the Medical profession be urged to prescribe the preparations of that publication, and further, that this resolution be forwarded to the Medical and Pharmaceutical journals, and to the teachers of Medicine and Therapeutics in the United States.

James Tyson, M. D., John H. Musser, M. D., John Marshall, M. D., Horatio C. Wood, Jr., M. D., H. A. Hare, M. D., J. W. Holland, M. D., Alfred Stengel, M. D., David L. Edsall.

M. D., Seneca Egbert, M. D., M. C. Thrush, M. D., James Wilson, M. D., E. Q. Thornton, M. D., John V. Shoemaker, M. D., I. Newton Shively, M. D., J. M. Anders, M. D., S. Solis Cohen, M. D.

Feb. 3, 1908.

The Eleventh Annual Meeting of the American Gastro-Enterological Association will be held at Chicago, June 1st and 2nd, 1908, under the Presidency of Dr. J. P. Sawyer, Cleveland, Ohio. Dr. Charles D. Aaron, of Detroit, Mich., is the Secretary. Einhorn, Murdoch, Hammeter and Cannon are among the prominent contributors to the program.

News Items

NEWS ITEMS.

Dr. J. E. Percy, of Rock Mount, has moved to Beebe.

There has not been a death amongst physicians in Little Rock for three years.

Dr. Bauduy has moved his office from the Majestic building to the Reigler building on Louisiana street.

Dr. Kaiser, an osteopath, was recently licensed by the Eclectic Board to practice medicine and surgery.

Dr. E. A. Abbingtion, formerly of Beebe, has moved to Oklahoma City, in which city he will practice his profession.

Dr. J. J. Moncrief, the efficient secretary of the White-Cleburne Medical Society, has been appointed local surgeon for the St. Louis, Iron Mountain and Southern Railway.

Dr. Joseph P. Runyan, of Little Rock, has been appointed by President Stephenson, a delegate to the Fourth Annual Conference of the Council on Medical Education, of the American Medical Association. The meeting will be held at the Auditorium Hotel, Chicago. Monday, April 13, 1908, the session to begin at 10 o'clock.

Books Received

THE PRINCIPLES AND PRACTICE OF MODERN OTOTOLOGY. By John F. Barnhill, M. D., Professor of Otology, Laryngology, and Rhinology, Indiana University School of Medicine; and Ernest De Wales, B.S., M.D., Associate Professor of Otology, Laryngology and Rhinology, Indiana University School of Medicine. Octavo of 575 pages, with 305 original illustrations, many in colors. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$5.50 net; Half Morocco, \$7.00 net.

A REFERENCE HANDBOOK OF OBSTETRIC NURSING. By W. Reynolds Wilson, M. D., Visiting Physician to the Philadelphia Lying-in Charity; Member of the American Pediatric Society. 32mo of 258 pages, illustrated, Philadelphia and London: W. B. Saunders Company, 1907. Flexible leather, \$1.25 net.

A TEXT-BOOK OF MINOR SURGERY. By Edward Milton Foote, A.M., M.D., Instructor in Surgery, College of Physicians and Surgeons (Columbia University); Lecturer on Surgery, N. Y. Polyclinic Medical School; Visiting Surgeon, N. Y. City Hospital and St. Joseph's Hospital; Consulting Surgeon, Randall's Island Hospitals and Schools; formerly Chief in Surgery, Vanderbilt Clinic. Octavo; 752 pages; 407 engravings from original photographs and drawings. New York and London: D. Appleton and Co., 1908.

THE CORRECTION OF FEATURAL IMPERFECTIONS. By Charles C. Miller, M. D. Including the description of a variety of operations for improving the appearance of the face. 136 pages. 73 illustrations. Prepaid \$1.50. Published by the Author, 70 State St., Chicago, Ill.

THE TREATMENT OF FRACTURES: WITH NOTES UPON A FEW COMMON DISLOCATIONS. By Chas. L. Scudder, M.D., Surgeon to the Massachusetts General Hospital. Sixth Edition, Revised and Enlarged. Octavo volume of 635 pages, with 854 original illustrations. Philadelphia and London: W. B. Saunders Company, 1907. Polished Buckram, \$5.50 net; Half Morocco, \$7.00 net.

HOSPITAL TRAINING-SCHOOL METHODS AND THE HEAD NURSE. By Charlotte A. Aikens, late Director of Sibley Memorial Hospital, Washington, D. C.; Associate Editor of the National Hospital Record. 12mo of 267 pages. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$1.50 net.

DISEASES OF CHILDREN FOR NURSES. Including Infant Feeding, Therapeutic Measures Employed in Childhood, Treatment for Emergencies, Prophylaxis, Hygiene, and Nursing. By Robert S. McCombs, M. D., Assistant Physician to the Dispensary and Instructor of Nurses at the Children's Hospital of Philadelphia. Octavo of 431 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$2.00 net.

ATLAS AND TEXT-BOOK OF HUMAN ANATOMY. Volume III, completing the work. By Prof. J. Sobotta, of Wurzburg. Edited, with additions, by J. Playfair McMurrich, A. M., Ph.D., Professor of Anatomy at the University of Toronto, Canada. Quarto of 342 pages, containing 297 illustrations, mostly all in colors. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$6.00 net; Half Morocco, \$7.50 net.

DISEASES OF THE HEART. By Prof. Th. von Jurgensen, of Tübingen; Prof. Dr. L. von Schrotter, of Vienna. Edited, with additions, by George Dock, M. D., Professor of Medicine, University of Michigan, Ann Arbor. Octavo of 848 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1908. Cloth, \$5.00 net; Half Morocco, \$6.00 net.

THE PRACTITIONER'S 1908 VISITING LIST. 192 pages. \$1.25. Lea & Febiger, New York and Philadelphia.

THE PHYSICIANS VISITING LIST FOR 1908. Fifty-seventh year of publication. Price \$1.25. P. Blakiston's Son & Co., Philadelphia.

GONORRHEA: ITS DIAGNOSIS AND TREATMENT. By Frederick Baumann, Ph.D., M.D., Professor Genitourinary Diseases in the Reliance Medical College, and Instructor in Dermatology and Venereal Diseases in the College of Physicians and Surgeons, Chicago. 52 il-

illustrations in the text. D. Appleton and Co., New York and London, 1908.

Book Reviews

A TEXT-BOOK OF CLINICAL ANATOMY: FOR STUDENTS AND PRACTITIONERS. By Daniel N. Eisendrath, A. B., M. D. Clinical Professor of Anatomy in the Medical Department of the University of Illinois (College of Physicians and Surgeons), Chicago. Second Revised Edition. Octavo of 535 pages with 153 illustrations, a number in colors. Philadelphia and London: W. B. Saunders Company, 1907. Price, Cloth \$5.00 net; Half Morocco, \$6.50 net.

The profession in general stands greatly indebted to the author for this valuable work on clinical anatomy, which will fill a demand hitherto neglected. This work will occupy a unique place among text-books, as it is to serve as a bridge from descriptive anatomy to the clinical side as needed at the bedside and operating room by both medical and surgical practitioners. Surface and clinical anatomy should receive more attention in our medical schools, and students should be taught more the relations of parts and practical anatomy, which after all is only of most use to us. The author makes frequent digressions from his discussions of normal anatomy to abnormal anatomy in order that the etiology of pathological conditions may be more fully appreciated by the student and practitioner. An attractive feature of the work is the profuse illustrations throughout and the evidence of originality. The demand for the work will increase because its contents will appeal to the profession. W. C. D.

OBSTETRICS: A TEXT-BOOK FOR THE USE OF STUDENTS AND PRACTITIONERS. By J. Whitridge Williams, Professor of Obstetrics, Johns Hopkins University; Obstetrician-in-Chief to the Johns Hopkins Hospital, Gynecologist to the Union Protestant Infirmary, Baltimore, Md. Second Enlarged and Revised Edition. 16 Plates and 676 Illustrations in the text. New York and London: D. Appleton and Co., 1908.

When the first edition of Dr. Williams' book appeared in 1903, it immediately was adopted as

the choice text by many of the best medical colleges, at the same time winning popularity from the practitioner who appreciated the scientific presentation of the subject in a practical manner. In the second edition the chapters upon the Development of the Ovum and upon the Toxemias of Pregnancy have been entirely rewritten. Additions have been made to the subject, of Metabolism of Normal Pregnancy, Vaginal Caesarian Section, Pubiotomy, and Contraction of the Pelvic Outlet.

From the standpoint of present interest the chapters upon puerperal infection, the toxemias of pregnancy and operative procedures, including pubiotomy, are the most interesting. The illustrations in the work, drawn from the author's own specimens under his supervision, are accurate reproductions of the original. After each subject which justifies it, is appended a tolerably complete bibliography. The language is clear, concise and convincing, and it is not believed a superior work on obstetrics is in print.

A TEXT-BOOK OF DISEASES OF THE THROAT AND NOSE. By D. Braden Kyle, A. M. M. D., Professor of Laryngology and Rhinology, Jefferson Medical College, etc. 219 Illustrations, 26 of them in colors. Fourth Edition, Thoroughly Revised and Enlarged. Philadelphia and London: W. B. Saunders Company, 1907. Pp. 797.

The fourth edition of this very excellent and popular text-book does not differ in general plan and arrangement from the previous editions; but many new articles have been added, notably amongst which may be mentioned Vincent's Angina, Lithemic Rhinitis, Empyema of the Antrum in the Young, Actinomycosis of the Tonsil, Bronchoscopy; Voice, Speech, Defects of Speech and Relation of Voice to Hearing. Alterations or additions have been made in some fifty-two chapters which means that a thorough revision has been made, bringing the subject matter up to the very latest standpoint.

The object of the author has been to present the subjects in a clear and concise manner, and in doing this, he has sacrificed no space in the chapters on diagnosis and methods of exam-

inations. These chapters are exceptionally plain and lucid, and the illustrations sufficient to make every detail understandable. The treatment outlined is that which has proven the best in the experience of the author. It is a pleasure to recommend this book to the student and general practitioner.

APPLETON'S MODERN CLINICAL MEDICINE. DISEASES OF THE NERVOUS SYSTEM. Edited by Archibald Church, M.D., Prof. of Nervous and Mental Disease and Medical Jurisprudence in Medical Dept. Northwestern University, Chicago. 195 text illustrations and 5 colored plates. D. Appleton & Co., New York and London. Price, \$7.00.

Twenty-one well-known German neurologists contribute the articles in this, the fourth volume of *Die Deutsche Klinik*. The work is of composite authorship, and naturally objections would be looked for in such a system. But in this instance, it would require specific citations to convince one of these objections. Dr. Church, of Chicago, the American editor, realizing the proper scope of the work, contemplated making copious addenda to the text, but deemed it expedient to let each author stand responsible for the subject matter which he had personally presented.

The authors include such authorities as Erb, Eichorst, Edinger, Guttman, Quincke, and Wernicke. The treatment outlined for the diseases discussed is sufficiently satisfying to Americans who are supposed to have more faith in drugs than Germans.

The book is devoted exclusively to consideration of diseases of the nervous system. A cursory examination would indicate the high character of the book, but not until some special subject is referred to, such as neuritis or polyneuritis, as the writer has had occasion to do, that and adequate estimation can be placed upon its value.

The first one hundred and twenty-eight pages are devoted to Macroscopic Anatomy of the Central Nervous System; Histology of the Central Nervous System and Neuron Diseases. Then follow Chapters on General Neurological Diagnosis, by Schuster; Modern Aids in the Diagnosis and Diseases of the Brain, by Redlach.

Quinche writes the article on Lumba Puncture and Erb on Tabes Dorsalis.

A more representative combination of authors could hardly be imagined, and this book, the very latest exposition of one of the most interesting departments of medicine, should find its way into the library of every general practitioner.

A TEXT-BOOK OF THE PRACTICE OF MEDICINE. By James Anders, M. D., Ph. D., LL. D., Professor of the Theory and Practice of Medicine and of Clinical Medicine, Medico-Chirurgical College, Philadelphia. Eighth Revised Edition. Octavo of 1317 pages, fully illustrated. Philadelphia and London. W. B. Saunders Company, 1907. Cloth, \$5.50 net; Half Morocco, \$7.00 net.

From a very careful and critical examination of this, the eighth revised edition of Dr. Anders' well-known text-book, it is not difficult to arrive at the conviction of its many excellent features and qualities. The arrangement is natural and orderly, and much discrimination has been displayed in the recording of symptoms upon which diagnosis may be made. The suggestions as to treatment evince the author's good judgment and wide experience.

While some subjects are not treated of as exhaustively as an advanced student would wish, no more could be expected in a single volume supposed to cover the broad field of practice. Many new subjects are discussed, such as Aplastic Anemia of Senator, Vincent's Angina, etc. The sections on Tropical Parasitic Diseases show marked changes to keep pace with the advanced and accumulative knowledge on those subjects. Syphilis has been placed amongst the parasitic diseases, and very properly so.

There are many excellent single volumes on practice, and Anders' is a prominent one amongst the number. The binding and topography are excellent.

THE PANCREAS: ITS SURGERY AND PATHOLOGY. By A. W. Mayo Robson, D.Sc. (Leeds), F.R.C.S. (Eng.), and P. J. Cammidge, M.B. (Lond.), D.P.H. (Camb.). Illustrated. W. B. Saunders Company, Philadelphia and London, 1907.

As the last line has not yet been written of gall-bladder disease, so there remains much to be learned concerning affections of the pancreas; and it is just such a book as this one that clearly draws attention to the minimum amount of knowledge we possess of one of the most important digestive and metabolic glands in the body.

Nineteen chapters and over five hundred pages make up the book. Anatomy, histology, pathology, fat necrosis and diabetes, are discussed in the forepart; general symptomatology and diagnosis, inflammatory affections—acute, sub-acute and chronic pancreatitis—pancreolithic catarrh, pancreatic calculi and neoplasms in the latter portion. A most interesting chapter is that on chemical pathology—consideration being confined largely to the condition of the urine and feces found to accompany diseases of the gland. The author's remark in this connection, "that although they have devoted special attention to this subject for seven years, only the fringe has been touched upon."

The chapter on symptomatology and diagnosis is especially good. The signs and symptoms of pathological conditions of the pancreas, are classified and discussed under four heads: (1) physical signs, (2) digestive symptoms, (3) metabolic symptoms, (4) symptoms produced by artificial means.

Naturally one would expect to find diabetes thoroughly discussed, and no disappointment is felt, and Chapter XI, devoted to this subject, is one of the best in the book.

MANUAL OF HYGIENE AND SANITATION. By Seneca Egbert, A. M., M. D., Professor of Hygiene and Dean of the Medico-Chirurgical College of Philadelphia; member of the Academy of Natural Sciences of Philadelphia; member of the American Medical Association, etc., etc. Fourth Edition, enlarged and thoroughly revised. Illustrated with ninety-three engravings. Lea Brothers & Co., Philadelphia and New York. 1907.

The popularity which this little book has enjoyed, now in its fourth edition, is due to the fact that it possesses a merit that is convincing and which is easily seen on every one of its four hundred and ninety-eight pages. In revising this edition, Dr. Egbert has personally

scanned every sentence, rewritten many parts, and made every effort to present the subject in its very latest development. All of the subjects usually found in such works are discussed, and in that clear, concise style which is characteristic of the author. The theory of opsonins in the relation to immunity, the latest regulations of the U. S. Government in regard to quarantine and disinfection, sewage disposal, etc., are covered in some twenty or more additional pages not found in the previous edition. As a text-book, it is widely used, and will continue to be popular.

HANDBOOK OF CUTANEOUS THERAPEUTICS, INCLUDING SECTIONS ON THE X-RAY, HIGH-FREQUENCY CURRENT AND THE MINOR SURGERY OF THE SKIN. FOR THE USE OF GENERAL PRACTITIONERS. By W. A. Hardaway, M. D., LL. D., Professor of Diseases of the Skin and Syphilis in Washington University, St. Louis, and Joseph Grindon, Ph.B., M.D., Professor Clinical Dermatology and Syphilis in Washington University, St. Louis. 606 pages. Lea Brothers & Co., Philadelphia and New York. 1907.

This book by Hardaway and Grindon, is based upon the very excellent and popular manual of Skin Diseases by Dr. Hardaway, Dr. Grindon contributing the special sections on radiotherapy, the high-frequency current, galvanism, faradism and minor surgical procedures. Written for the general practitioner, and not the specialist, the authors have made the successful effort of presenting the treatment in a clear and easily comprehended manner.

Consideration of symptomatology, etiology and a certain amount of differential diagnosis, have not been omitted.

Selected formulae are appended at the end of many sections, a convenience not to be overlooked by the busy doctor. Dr. Isadore Dyer, of New Orleans, who has had a wide experience in the management of leprosy, has contributed the treatment of that disease. The newer methods of treatment, such as the X-ray, the opsonic method, electrolysis, etc., bring the book right up to date. The book is well written and is of decided value to those for whom it was written.

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NO. 10

Original Articles

THE NITROGENOUS CONSTITUENTS OF HUMAN URINE. ACIDITY AND ACIDOSIS BASED UPON ORIGINAL INVESTIGATIONS.*

By C. H. Hoffman, Ph.D., Little Rock.

While the metabolic exchanges are generally computed for a period of twenty-four hours, a week, is in my opinion, the most suitable period for the estimation of nitrogen and of the nitrogenous constituents of the urine. It is of advantage to designate the amount of nitrogen in these substances, instead of the amount of each respective substance. We obtain thereby a better insight into all of its relations. The healthy adult in the United States eliminates, according to my investigations, on an average in a week, about 100 grammes of nitrogen in his urine. These figures represent an absolute value for a period of one week, and none the less important relative values, namely the nitrogen of the different substances, in per cent. of the total nitrogen.

According to my estimations a week's urine, on a mixed diet contains:

Total Nitrogen, 100.

Urea Nitrogen—N. of urea, 88.0; N. of Ammonia, 5.0.

Group of Purin Bodies—N. of Uric Acid, 1.6; N. of Purin Bases 0.2.

Nitrogen of Kreatinin, 2.0.

Nitrogen of Hippuric Acid, 0.5.

Nitrogen of Ureoproteic Acid, 3.0.

Nitrogen Remainder, 4.0.

To compute the respective substances, the nitrogen must be multiplied with a factor: That of urea with 2.14; that of ammonia with 1.21; of uric acid with 3; of kreatinin with 2.69; of hippuric acid with 11.9. The formula of ureoproteic acid has not been definitely determined. The number of purin bases present in urine are nine, viz: xanthin, heteroxanthin, hypoxanthin, paraxanthin, guanin, adenin, episarcin, carnin, epiguanin.

To compute from their nitrogen the amount of bases, the factor 2.8 can be taken as an average.

The correct determination of the nitrogen of the purin bases, and kreatinin, and of ureoproteic acid requires a great deal of time, considerable technical skill, and a knowledge of chemistry. For clinical and physiologic purposes the examination is for these reasons usually limited to the determination of the total nitrogen or total urea group nitrogen, the average amount of which varies between twelve and ten per cent. The arrangement of groups two and three is based not alone upon the analytical technic, but also upon the genesis of these substances. The nitrogen of group two (urea group), results from the metabolism of ingested nitrogenous foods (principally albumen and also gelatin-yielding substances), and of the catabolism of the organism proper (chiefly the organized albumens of the tissues).

Nitrogen of group 3 (Uric Acid, Purin Bases).—These substances are derived from the nucleins, the principal chemical constituent of the nuclei of the cells. Besides the amount of these substances in the diet, their excretion is influenced by the amount of nucleated cells destroyed in the body, and second, as we shall explain later, by the functional activity of the kidney, since uric acid is destroyed in its passage through these organs. Purin bases when taken as such by the mouth are partly excreted as uric acid, and partly as urea, and a small amount of them remains unchanged. Purin bases in contradiction to uric acid are toxic, and will produce cardiac vascular and renal changes.

Group 4 (Creatinin).—Creatinin comes exclusively from the creatin of the meat consumed (100 grammes of fresh muscle contain on an average 9.2 per cent. of creatin), or it may be derived from the destruction of the muscular structures of the body. Its excretion depends essentially on the diet. A diet deficient in albuminous foods leads to a consumption of the body musculature, and yields under these circumstances the creatinin of the urine. It is never absent during starvation, while by a sufficient ingestion of cow's milk (creatin free) it is absent in the urine.

Group 5, the Amido Acids.—Hippuric acid

*Read before Pulaski County Medical Society, 1908.

is never absent in urine. It is formed from benzoic acid and glycocholl. The forerunners of benzoic acid are cinnamic acid, quinic acid, toluol, etc., and these substances are present to a more or less extent in vegetables. The hippuric acid excretion is always greater on a vegetable diet, and when hippuric acid is excreted on a meat diet exclusively, it is due to benzoic acid derived from the putrefaction of albumens in the large intestine.

Group 7. Nitrogen Remainder, is made up of small amounts of allantoin, oxalic acid, rhodan, further from mucin and nucleoalbumin (resulting from catarrhal inflammations of the urinary passages), as well as from other unknown substances. Since the determination of the nitrogen of group 4, 5, 6 and 7 is very difficult, and requires considerable time, the nitrogen of these groups for clinical purposes is usually computed from the difference of the nitrogen of groups 2 and 3, and that of the total nitrogen, and is designated in the appended tables as extractive nitrogen or E. N.

While in charge of the Pathologic Laboratory of the State Institutions of Iowa, located at Mount Pleasant, I studied, besides other subjects, the nitrogen elimination. For this purpose the urine of nine males and females, all consuming the institution diet was collected for a period of a week, and exact analysis of the nitrogenous constituents were made for that period in order to arrive at an average.

I found on an average for every 100 grammes of nitrogen eliminated: nitrogen of the urea group, 87.5; nitrogen of purin bodies group, 2.2; extractive nitrogen, 10.3. Or as to different periods of the day for 100 grammes of nitrogen:

Hours	Of urea group	N. of purin bases	N. of extractives
7 to 11	87.5	2.3	10.2
11 to 3	86.2	3.2	10.6
3 to 6	87.2	2.1	10.7
6 to 8	88.5	2.1	9.4
9 to 2	89.5	1.9	8.6
2 to 7	86.2	2.2	11.6

ACIDITY. The ash of the vegetable articles of the diet is alkaline. The ash of meats is strongly acid. Sulfuric acid is formed from the oxidation of the sulfur in the albumen molecule. The ash of the substances of a mixed diet is approximately neutral. The oxidation of albuminous substances in the organism, that is of their sulfur, yields sulfuric acid. The food substances yield also as precursors to their complete oxidation to carbon dioxide and water, organic acids. Some of these organic acids undergo no further oxidation but are eliminated united to another product of albuminous oxidation ammonia, and to the bases to soda, potash,

lime or magnesia in the urine. Such acids are uroproteic, and oxalic acids and their salts are never absent from human urine.

We find, consequently, of inorganic acids in the urine, hydrochloric and phosphoric acids which are mostly taken in an organic form. All of the hydrochloric acid is (chlorides of food), and also some of the phosphoric acid (phosphates in meats and vegetables). Some of the phosphoric acid is formed from the oxidation of elementary phosphor present in cell nuclei, etc., while mostly all of the sulfuric acid is formed in the body, also organic acids, uroproteic, oxalic, carbonic, etc. Of bases, we find the alkali metals, soda and potash; the alkaline earths lime and magnesia, and considerable quantities of ammonia.

Normal human urine reacts acid. It contains no free acids but acid salts, principally acid phosphates. Orthophosphoric acid H_3PO_4 , forms three series of salts: the primary of the formula NaH_2PO_4 , which react acid; the secondary of the formula Na_2HPO_4 which react ready alkaline, and the tertiary Na_3PO_4 , which react alkaline in so far as they are soluble. The secondary salts of the alkaline earths, viz., dicalcic and dimagnesium phosphate are almost insoluble, all the tertiary phosphates of lime and magnesia are insoluble. A clear urine consequently contains but small quantities of the secondary salts of lime and magnesia and none of the tertiary.

The reaction of the urine does not depend so much upon the absolute quantity of its phosphates, but upon the miscible proportions of its primary and secondary salts, and urine always contains both. For briefness sake we call that amount of phosphoric acid which is present as primary salts, the acid P_2O_5 , and compare it with the total quantity of P_2O_5 in the urine, so that we figure the acid per 100 parts of the total P_2O_5 . It is customary in urinalyses to figure the results of the amount of phosphoric acid present as P_2O_5 , the anhydrid of the acid. Human urine reacting acid contains on an average 57 parts by weight of acid P_2O_5 , and 43 parts by weight of secondary salts. Tested with sensitive litmus paper it is amphoteric with 35 per cent. of acid P_2O_5 ; it is alkaline with 20 per cent. of acid P_2O_5 , and at that per cent. is cloudy, due to precipitation of secondary phosphates. In my urinary studies I have never observed more than 91 per cent. of acid P_2O_5 , and free acids do not occur in human urine. The degree of urinary acidity can be estimated and denoted in accurate figures by determining the acid P_2O_5 . Exacter results could be obtained if we could titrate the urine with a proper indicator. For instance, the addition of decinormal soda solution until all the acid salts are neutralized, viz: so that there are only tertiary phosphates, second-

ary sulfates, carbonates, etc. When this stage has been reached, the urine would contain on the addition of another drop of soda solution only free NaOH. To another portion we could add as much HCl until all polybasic acids are present as primary salts, the next drop will result in the presence of free HCl. This method, correct from a chemical standpoint, is impracticable because we do not possess sufficiently sensitive indicators. So for the present, we must be satisfied with estimating the total quantity of phosphoric acid present and the acid P2O5.

ACIDOSIS. The carbon dioxide resorbed by the blood from the tissues is chemically combined and present in the blood in the form of carbonates. The property of the blood to resorb carbon dioxide from the tissues depends upon the degree of its alkalinity. To maintain this property at its maximum height under normal conditions is the function of the kidney. The kidney separates from the alkaline blood an acid secretion, the urine. If, due to abnormal conditions, the alkalinity of the blood is diminished by receiving too large quantities of acid, then the functional activity of the kidney can not remove them completely. As the result of this hyperacidity of the blood (or more correctly, marked diminution of the alkalinity of the blood), there is danger of carbon dioxide poisoning, since the tissues are no longer able to part with their carbon dioxide to the blood. This acidosis is prevented by the ammonia, which with organic acids is formed as an intermediary product of the oxidation of albumens, and it serves in this instance as an alkali for the neutralization of the excessive quantities of acid. This ammonia would, under normal conditions, undergo conversion into urea. The amount of ammonia eliminated in the urine is always a key to the degree of acidosis. There is danger that a long continued hyperacidity of the blood will eventually attack the triple phosphates of the bone, and in conditions of this kind, the urine contains increased quantities of the phosphates of lime and magnesia. Cases of rickets and osteomalacias show a marked degree of acidosis.

The neutralization of excessive acids by ammonia, occurs if, as the result of the ingestion of large amounts of meat, eggs, or other albuminous materials, too much sulfuric acid is formed. If large quantities of mineral acids have been taken, or when the power of the cells to oxidise the organic acids formed is impaired, as we observe during the increased muscular activity as well as in some of the severer infections and intoxications.

The liver is the principal organ where the conversion of ammonia into urea takes place. This function becomes impaired in diseases of

this organ and consequently not all the ammonia may be converted into urea. The amount of ammonia in the urine becomes increased. The liver also oxidises some of the higher organic acids, such as leucin (amidocaproic acid) and tyrosin (oxyphenylamidopropionic acid); and in all pathologic conditions interfering with the function of the liver cells, these acids can be found in the urine. For the study of these disturbances by urinalysis it would be best (at least from the theoretical point of view) if we could estimate in a definite quantity of urine all the bases, the acids and the amount of ammonia. An examination of this kind requires more time than the clinician can devote to it, but can be made readily by the physiologic chemist. In the laboratory of physiologic chemistry we determine in such cases all the bases inclusive of ammonia, and all inorganic acids; the excess of bases gives us the organic acids. For the clinician, however, the ammonia contents of the urine is a sufficient index for the degree of acidosis. I will append the results of physiologic experiments and determinations before I pass to pathologic conditions.

The mixed twenty-four hours urine of twelve men was collected for ten days and tested for its urea nitrogen, ammonia nitrogen, phosphoric acid and percentage of acid P2O5. It was necessary for these investigations, to sterilize the urine during collection with thymol, to exclude ammoniacal fermentation. The urea nitrogen fluctuated between 82.0 and 86.0; that of the ammonia nitrogen between 4.7 and 5.0. The fluctuation on different days is referable to differences of diet. For further information of the effects of sodium bicarbonate, see Table 1.

The first day no soda was given, and the average elimination per man was, total nitrogen, 11.1 grammes containing 9.7 grammes of nitrogen as urea, and 0.55 grammes of nitrogen as ammonia. The total quantity of phosphoric acid per man per day, was 2.4 grammes, and that of the acid P2O5 (primary) 1.14.

On the second day each man received eight grammes of sodium bicarbonate, and 7.5 grammes of citric acid in 350 c.c. of water. The same amount was given on the third day. As can be seen from the appended table (No. 1) their effect upon the excretion of ammonia nitrogen and acid P2O5, was moderate, but of long duration; it required four days till the elimination of ammonia nitrogen and acid P2O5 became normal.

I have no experiments with ingestion of mineral acids, but will append an original investigation of the effect of muscular exercise upon the urine. During four hours rest 456 c.c. of urine having a specific gravity of 1.005 were eliminated; during the muscular exercise (climbing a hill for four

hours) 184 c.c. of urine having a specific gravity of 1.008 were passed (See Table No. 2).

I have no data of my own concerning the composition of the urine during a period of absolute fasting but it seems, since the tissues of the body are consumed in a condition of that kind, that the urine would resemble that of a meat diet. According to the statements found in most text books, the relative quantities of ammonia and of uric acid are increased two and three fold during starvation. The books do not give the relative contents of acid P2O5.

On a pure meat diet (even now-a-days erroneously prescribed for diabetics) such as meat, eggs, cheese, cream, etc., the nitrogen of the urea group amounts to 92.5, that of the purin bodies 1.4, uric acid 1.3 and extractive nitrogen about 6.0. On a strictly milk diet the nitrogen of the urea group was 90.0, purin nitrogen 1.0, extractive nitrogen, 9. On a strictly vegetarian diet the corresponding values nitrogen of urea group 84.0; nitrogen of purin 2.4; uric acid nitrogen, 1.9; extractive nitrogen was 14.

The excretion of uric acid to its dietary relation has always been an object of interest. First, on account of its relation to gout and the so-called uric acid diathesis; second, on account of the discovery of the purin bodies, to which substances uric acid belongs, and the discovery that the source of the purin bodies are the nucleins and nucleoalbumins. Since nucleins may be derived either from the food, or from the tissue-cells of the organism, the excretion of the purin bases and of uric acid is primarily determined by the amount of nuclein containing food that is eaten, and by the catabolism of the proper tissues of the body. Not all the purin bodies and not all the uric acid formed in the body are eliminated as such, some uric acid and purin bases are destroyed in the kidneys, and some become oxidised by the cells into urea.

PATHOLOGIC STUDIES. Urine of dogs after extirpation of liver. If we produce in a dog an Eck's fistula: namely, unite the portal vein with the hepatic vein, the urine shows but little alteration if the animal so experimented on has been fed but little or no meat. If they have been fed large quantities of meat, or salts of ammonia, or after the operation introduced into the stomach, the urine becomes strongly alkaline, the ammonia nitrogen contents are increased to a considerable extent and the animal exhibits symptoms of ammonia intoxication. What little func-

tion the liver can exercise over the small quantities of portal blood that reach it by the route of the hepatic artery (vena cava, heart, arteries), is sufficient to transform small quantities of ammonia into urea. The organic acids become evidently all or in part oxidised, or linked, or else there would be but little free ammonia.

If, after the establishment of the Eck's fistula, the liver tissue is crushed, the urine becomes strongly acid, its contents of relative urea nitrogen decreased from a normal of about 87.0 to about 70.0 and the relative ammonia contents are correspondingly increased from 3.0 to 15.0. The administration of soda will not prevent the acid intoxication or acidosis, and the animals succumb fast.

In the fever of chronic tuberculosis and in the cachexia of cancer due to pyloric stenosis, the composition of the urine does not differ markedly from the urine of fasting and of meat diets: in both conditions the patient consumes his tissue-albumens (See Table No. 3).

TABLE NO. 1

Urine of healthy men under influence of soda, etc., average of twenty-four hours elimination.

Days	Total N.	Urea N.	Ammonia N.	P2O5 Total	Acid P2O5
1st. No soda	11.1	9.7	0.55	2.4	1.4
2nd. Soda	11.5	10.0	0.38	2.3	0.8
3rd. Soda	11.2	10.1	0.25	2.3	0.4
4th No soda	11.9	10.3	0.29	2.5	0.9
5th No. soda	10.0	8.8	0.43	2.3	1.3
6th No soda	12.0	10.8	0.53	2.6	1.5
7th No soda	14.7	12.4	0.75	2.8	1.8

Or per 100 grammes of total nitrogen we have:

Days	Urea N.	Ammonia N.	Total	Acid for 100 parts of P2O5
1st No soda	87.1	5.0	22.	57.
2nd Soda	87.2	3.3	20.	35.
3rd Soda	90.2	2.2	21.	18.
4th No soda	86.6	2.4	21.	38.
5th No soda	88.0	5.1	23.	56.
6th No soda	90.5	4.5	21.	58.
7th No soda	94.1	4.9	19.	64.

Remember the date, the time, and the place. Annual Meeting of the Arkansas Medical Society, May 13, 14, 15, Auditorium (Skating Rink), West Markham Street, Little Rock. House of Delegates meets on Tuesday, the 12th.

TABLE NO. 2.

Elimination during four hours rest in bed, and while climbing four hours.

Condition	Total N.	Urea N.	Ammonia N.	Uric Acid N.	Purin Bases N.	Total P2O5	Acid P2O5
Rest	1.61	1.40	0.062	0.024	0.0037	0.222	0.196
Climbing	0.99	0.84	0.052	0.0156	0.0012	0.117	0.107

For 100 grammes of total nitrogen:

Condition	Urea N.	Ammonia N.	Uric Acid N.	Purin Bases N.	Total P2O5	Acid P2O5 for 100 parts of total P2O5
Rest	87.0	3.8	1.5	0.25	14.	88.
Climbing	84.4	5.3	1.5	0.13	12.	91.

TABLE NO. 3

Pathologic Urines. Average for twenty-four hours:

Disease	Total N.	Urea N.	Ammonia N.	Uric Acid N.	Purin B. N.	Total P2O5	Acid P2O5
Pulmonary Tuberculosis				1.4	0.4		
Cancer (cachexia)	5.3		4.6				
Acute miliary tuberculosis	2.8	2.0	0.30	0.11	0.09	0.65	0.51
Myelogenous pseudo-leucaemia	4.9		4.3	0.87	0.02		

Per 100 grammes of total nitrogen:

Disease	Urea N.	Ammonia N.	Uric Acid N.	Purin B. N.	Total P2O5	Acid P2O5 per 100 parts of total P2O5
Pulmonary tuberculosis		83.6	2.5	1.0		
Cancer (cachexia)	72.	11.	3.3	0.7	23.	78
Acute miliary tuberculosis		87.	1.8	0.3		
Myelogenous pseudo-leucaemia	88.	5.4			17.	67.

TABLE NO. 4

Average of twenty-four hours.

Disease. Case 1.	Total N.	Urea N.	Ammonia N.	Uric Acid N.	Purin B. N.	Total P2O5	Acid P2O5
Cirrhosis 61 days before death	11.1	8.5	0.8	0.22		1.0	0.3
6 days before death	6.9	5.4	0.4	0.22		1.3	1.00
Case No. 2 Phosphor poisoning	12.1	8.3	1.5	0.29		2.00	0.65
Case No. 3 Diabetes	24.5	18.9	3.5	0.37		4.00	1.2
Case No. 4 Severe diabetes							
6th day	4.15	2.4	1.4				
7th day	4.79	3.3	1.3			0.62	0.40
22nd and 23rd day							
Coma 23rd day	4.56	2.9	1.4			1.12	0.55

Or per 100 grammes of total nitrogen:

Disease	Urea N.	Ammonia N.	Uric Acid and Purin B. N.	Total P2O5	Acid P2O5 per 100 parts of total P2O5
Case No. 1					
61 days					
before death	77.	74.4	2.0	9.4	71.
6 days					
before death	77.	6.4	3.2	10.	75.
Case No. 2					
Phosphor poisoning	68.	12.6	2.4	16.4	33.
Case No. 3					
Diabetes	77.	14.	1.5	16.5	55.
Case No. 4					
Diabetes					
6th day	58	34.		15.	64.
7th day	67.	27.		24.	52.
22nd and 23rd day. Coma					
23rd day	63.	31.		24.	49.

TABLE NO. 5

First period with twenty grammes sodium bicarbonate per diem. Absolute amounts per twenty-four hours:

Condition	Total N.	Ammonia N.	Total P2O5	Acid P2O5
Diabetic	15.4 gr.	2.4 gr.	2.2 gr.	0.7 gr.
Healthy	15.5	0.63	1.6	0.16

Second period, no sodium. Absolute value for twenty-four hours:

Diabetic	17.0	0.63	2.9	0.97
Healthy	14.2	2.3	2.0	0.4

Third period with twenty grammes of sodium bicarb. per day. Absolute value in grammes:

Diabetic	15.3	4.3	2.3	0.6
Healthy	14.1	0.9	1.6	0.1

Relative figures per 100 grammes:

First Period		
Condition	Ammonia N.	Total P2O5
Diabetic	25.	17.
Healthy	16.	13.
Second Period		
Diabetic	15.	14.
Healthy	5.	10.
Third Period		
Diabetic	28.	15.
Healthy	6.	11.

Case No. 1. (Table No. 4) is one of cirrhosis of the liver. The liver affection in this case did not involve the urine seriously; on account of the nutritional disturbance it resembles the urine of fasting. The postmortem revealed the presence

of a still considerable amount of functioning liver tissue.

Case No. 2, (Table No. 4.) This was an insane patient who swallowed six days before her death some phosphor from matches. When the urine was collected her body temperature was 104.4. The liver at the autopsy was swollen, of yellowish gray color and had the appearance of having been boiled. Characteristic of this condition is the low urinary acidity. The small quantities of extractive nitrogen in Case 3 and 4, Table No. 4, is not characteristic of diabetes, but of the faulty diabetic diet, meat and fat. The large quantities of ammonia N. and high acidity are characteristic of this disease. The urine of Case No. 4, Table No. 4, contained on an average from 3. % to 7. % of sugar, and about 0.2 % of aceton. Placed on a suitable diet and about eight grammes of sodium bicarbonate daily, the child improved gradually. At the beginning of the treatment the improvement was interrupted by frequent attacks of coma, lasting from twelve to twenty-four hours, during which the relative ammonia nitrogen of the urine increased to about 40.0. The attacks disappeared gradually, and the child was dismissed in a considerably improved condition, the ammonia nitrogen having fallen to about 18.0, and the child having gained about seven pounds in weight. Its urine was sent to the laboratory once after its dismissal from the hospital. The parents being ignorant, the dietary instructions were not carried out, and the child died about five weeks after its dismissal.

Richter found in a case of acute yellow atrophy during the last two days preceding death, an average total N. 9.6 grammes; urea n. 6.7 gram-

mes, ammonia n. 1.27 grammes, viz: urea n. 70. %; ammonia n. 13.2 %.

In severe diseases of the stomach and intestines, Czerny has found the relative urea N. as low as 54 %, and the ammonia n. as high as 25%.

Table No. 6. Contains the elimination of a severe case of diabetes with and without the addition of soda to the diet. For the purpose of comparison the urine of a healthy individual receiving the same diet and the soda on the same day as the diabetic was analysed.

I have not been able to confirm the statements that gouty individuals eliminate relatively less uric acid than healthy individuals. The uric acid output is somewhat increased during an attack of gout, and during a period preceding the attack there is a slight decrease; in the interval, however, there is no difference in the urine of gouty subjects from that of healthy persons. The acidity of the urine in gout is higher than normal. Gouty urine possesses one peculiarity which up to the present day has not been satisfactorily explained, namely, the uric acid is readily precipitated from the freshly voided urine. The formation of uric acid crystals can be observed immediately after voiding, before the urine cools, and in less expressed cases the crystals separate out by a specific gravity of 1.020, or less, after the urine has stood a few hours. The slightly increased acidity of the urine is not the cause of this, for I have observed it also by as low a relative value of acid P_2O_5 as 40 % and 50%. Urine of persons affected with gravel, calculi, uric acid diathesis, diabetes and of hysterical individuals, shows at times the same peculiarity.

The more a man exercises the more does he disassimilate the albumens of his own tissues, and the more urea n. must he excrete. Abundant drinking of water, or diuresis stimulated by other means, leads to the elimination in the urine of considerable nitrogenous waste products, chiefly urea; while inversely, restriction of water or loss of water through other channels than the kidneys (profuse sweating, vomiting, diarrhoeas), leads to a decrease of the urinary nitrogen and of the urea nitrogen. In all fevers there is great destruction of albumens, and hence, increased excretion of urea and ammonia nitrogen, and the same applies as our analyses have shown to all cachetic states where the individual consumes his own tissues (catabolism of the organized albumens of the body proper). In cases where the food is poorly assimilated, as in catarrh or atrophy of the stomach (figures cited from Czerny), or intestines, then the nitrogen ingested reappears in the feces and is not absorbed, and consequently is not eliminated in the urine, so here again we find the urea nitrogen decreased.

In acidosis, that is in any condition in which

the alkalinity of the blood is diminished, the acidity increased, as our tables show; such changes in the blood reaction may be physiologic (exercise, etc.) or pathologic, due to entrance into the circulation of abnormal acid products, diabetes, gout, obesity: the urea output is decreased, and the ammonia n. is correspondingly increased.

We are conducting in the laboratory of the Pulaski County Hospital at the present some studies in the elimination of urea in diseases of the kidneys. The ordinary determinations that have been made of urea as an index of insufficient renal functions are fallacious. For the state of the renal function can not be estimated from the percentage of urea in the urine. To determine the state of the renal function in kidney disease, the patient must be in a state of N. equilibrium. Next, not the excretion of urea alone, but the total urea and N. must be estimated. Does the plus or minus of urea excretion give us reliable information in regard to the excretory powers of the kidney? In cases of acute nephritis, with almost total suppression of urine, cases of anuria in surgical diseases of the kidney, such as tuberculosis, hydronephrosis, etc., and terminal forms of interstitial nephritis in which the function of the kidney is almost arrested, the disturbed kidney function is so apparent that the determination of urea is unnecessary, for in those conditions neither urea nor other ordinary urinary solids are excreted. We have without question also acute exacerbations of parenchymatous nephritis, and cases of true Bright's disease in which we have some temporary retention of urea, but such cases are rare. We have made investigations in which both N. and urea estimations were made in cases of nephritis in which the elimination of N. was diminished, but at the same time we found that the patients had gained in weight. In these there is no doubt that the N. was retained, but not in the form of N. waste; but in the form of organized albumens the N. was transformed in the blood and flesh. We can consequently only speak of the retention of N. due to insufficient action on the part of the kidneys if by accurate metabolic studies we find that less nitrogen is excreted in the urine than is ingested by the food after the deduction of the nitrogen of the faeces.

Granting for the sake of argument that insufficient elimination of urea has been determined in some chronic cases of nephritis, does this finding always indicate insufficient function? No. There are healthy individuals in whom at times retention of urea occurs. A retention at best only indicates renal inadequacy for urea, but by no means for the other waste products that are carried to the kidney in the renal blood. Van Noorden and his pupils have shown that in many

cases of nephritis the relation between the N. intake and output may be changeable, that periods of good elimination may alternate with periods of bad elimination without other evidences of renal insufficiency.

There are clinicians and some pathologists, however, who insist that these fluctuations in the urea and N. output should be considered as characteristics of Bright's disease, and that they are due to certain metabolic changes, and not to changes in the functional powers of the kidney. Great care, therefore, must be exercised in interpreting the plus and minus of urea elimination as an index of the function of the kidney, even if all the common sources of error are eliminated. We possess fortunately in cryoscopy, a more accurate and reliable means for estimating the functional power of the kidney than urea determination. There can also be another source of error granting that the kidneys are really insufficient, and this insufficiency is manifested by partial retention of the urea. Granting that as a result of this a large amount of retained urea was circulating in the blood, or that possibly the patient was suffering from some febrile or wasting disease, malignant tumor, diabetes, etc., causing an abnormally large amount of urea to be thrown into the blood stream and carried to the kidney, the result would be the partial retention of an abnormally large amount of urea, and consequently the elimination of a

quantity of urea which would approximate the normal average figures. Here, then, real renal inadequacy would be masked, if we relied upon the excretion of urea as an index.

To summarize what has been said, the determination of urea and total nitrogen, unless performed with the painstaking accuracy of a metabolic experiment, and covering a considerable period of time, are of small value. Performed in a proper manner they are of inestimable value, but their results must at all times be interpreted with care and conservatism, particularly in drawing conclusions as to renal insufficiency. The ordinary urea determinations as performed by some practitioners and in some clinical laboratories with the Doremus apparatus (a method which by itself carries more than 7 per cent. of error, and the employment of which is nothing short of ceremonious delusion), are often worse than valueless, for they may give rise to serious misinterpretations, causing on the one hand alarm, where there is no danger, lulling the physician into a false state of security; on the other, when serious danger is impending. Combined with the crude ideas of underfeeding the poor nephritic (exclusive milk diet, withdrawal of meat, etc.) that are largely employed, I think this kind of urea determinations are the chief reasons why so many nephritics are starved to death. It is a pity that so much time is wasted in making them.

NOTICE

This number contains the Constitution and By-Laws of the Arkansas Medical Society, adopted at the May Session, 1908; also the Jelks' and Young Amendments.

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Editorials

WHAT IS THE MATTER?

It is a sad comment on the efforts of some of our professional brethren when we realize how hard they work and how little they receive. It is strange to hear the whines of men who have not done so well in their professional lives, and equally strange to listen to the boasts of the pretender, whom the community knows has done no better than his honest co-worker who has, perhaps, labored twice as faithfully and hard.

A little investigation may not be amiss. There is no good reason why a physician should not have business to attend to, and, on the other hand, there is no good reason why a physician should not receive a just compensation for his services. There is one of two things that is the matter: either he does not attend to his duty, does not get business as he should, or, after he gets it, does not take proper care of it. It is no trouble for a physician to get practice—granting that he has merit, and no one should practice who has not merit. It follows then that merit must improve, and to improve merit and win esteem one must do something just a little better than the other fellow; and to do this will necessitate work on the part of him who is ambitious to excel. The day and time has passed when a "doctor" could get a pair of saddle-bags and an old gray horse and be hailed as "Doc" all over the community and looked upon as the foremost man, not only medically speaking, but in every other way, so far as concerns his immediate surroundings. The modern physician has outgrown that day and time. People do not fall over one another for the sake of getting to call in any physician who has no merit. The laity are alive to the fact of one's superior skill. The question, "Where did you graduate?" is not asked now as it used to be. The laity want to know what you are doing in the matter of keeping up with the times. Your diploma signifies that you knew enough to graduate at the time your diploma was given you; your county society membership and the position that you occupy in the medical profession as one of the workers, represent your worth and skill as a medical man at the present.

After all, doctor, don't you think that if you

employ a little tact, coupled with a little more energy—just enough ginger to make things hum around you—that you would be in better position? Don't you think that you would have money to pay for a postgraduate course? Don't you think that you would have money to attend some of the clinics, or do the thousand and one things which you are not able to do now? If your brother practitioner has the reputation of attending to a call a few hours late, after receiving it, make it a point to answer your calls immediately. If he has the reputation of in a sort of half-hearted way attending to his cases, make it a point to give your cases extra attention. If he has renown for giving large and nauseous doses of medicine, make it a point to show that you can improve on this method. If he has the reputation of casually examining his cases, see to it that you are extra thorough in your examination. Be extremely careful about your diagnosis; remember it is not so much trouble to treat after the diagnosis is made.

In addition to that, the friends want to know something of the prognosis. The man who can hold up some hope, based upon accurate scientific diagnosis, is the man who is wanted. The physician who closes his eyes and says of a case, "nothing can be done," but cannot or will not tell why he says this, is not the man that the people want.

As a matter of fact, there is something for all of us to do, and the keynote to the whole situation is to do that something a little better than anyone else, if we will just find out what that something is, and see to it that we are improving in this one line.

We have recently learned of one of the most famous and conscientious practitioners in diagnosis, who receives \$25 for a diagnosis. When this diagnosis is made his services are at an end. The medical profession of his entire State, however, have such unlimited confidence in his skill that his diagnosis is accepted without a word. Is it not possible for us to improve along this line if we can only search and find out the given thing which suits us best?

There is another side to the question, and that is the financial. It is one thing to earn

money and quite another to get it. There is nothing else that pays the grocer's bill like money; there is nothing else that meets every-day expenses like money. You cannot settle your accounts with the promises of your patients. If they neglect to pay you, you must necessarily disappoint some one else. Put your practice on a business basis, the same as a merchant would do.

If we will only examine ourselves and analyze the conditions, there is one word that will spell out more than any other that is the matter with those of us who do not have money to pay our debts. Manifestly there is no other word in the English language that so aptly describes the difficulty; that one word is LAZINESS!

THE COMING MEETING OF THE ARKANSAS MEDICAL SOCIETY.

It is now time for the medical profession of the State to begin making arrangements to attend the meeting of the State Society, which will be held in the Auditorium (skating rink) at Little Rock, May 13, 14 and 15. The Little Rock Board of Trade will entertain the Society with an annual banquet. The various committees have been appointed and are at work, and from all indications this will be the banner meeting of any ever held. The Secretary informs us that everything is now ready, so far as can be, and the work progressing satisfactorily along all lines and a splendid meeting foreshadowed.

Now, doctor, remember that this is your meeting only in part. The other part belongs to your wife and your daughter, mother or sister, (or sweetheart, if you are so unfortunate as not to possess a wife! The best meetings we have ever had have always been those which the ladies graced by their presence in large numbers. Dilatory doctors who would not have attended were stimulated by a desire on the part of their ladies to be present and enjoy the meeting, and they were always glad to co-operate with the men in getting others to attend. Every member's ladies are invited to attend, and every one of these in the State of Arkansas, who reads this article should understand that her pres-

ence will play a most important part in contributing to the success of this meeting of the Arkansas Medical Society. So if you don't come, we shall be disappointed, and this disappointment will be felt all along the line. Begin to think about it now and decide in our favor.

One more word concerning the attendance of the members of the Arkansas Medical Society at this meeting. Remember, as heretofore, that you are expected to occupy your place and do your part as a faithful practitioner; and not to sit idly by while some one reads a paper and others discuss it. Look over the program carefully and find out what subjects you are most interested in and that which concerns you most vitally, and which you would like to hear discussed fully and thoroughly, add to your store of knowledge by reading such articles as are at hand; study up on them, and if the essayist fails to bring out a point along the line of the authorities, or along the line of your experience, do not hesitate for one moment to get up and file your objections then and there. Discussion is the only way to make a paper interesting and profitable. A paper that does not elicit discussion, is not really worth reading.

Now, another thing, in writing your paper, be careful not to quote exclusively text-book data. Practitioners can read those text-books as fast as you can copy them; and they have not the time nor the patience to listen to a text-book essay. Write your own experience, even though it may be in the treatment of ordinary chills and fever, if you can describe some interesting feature that troubled you, you may provoke a discussion which will be exceedingly interesting and valuable. If you will relate some experience which you met in the years of your practice that have gone by, it may follow that this experience will be new to others, and not only new to them, but they may get a point which will be beneficial to them and not to them alone, but to their patients. Thorough discussion and exchange of views is not so much for the edification of the members as it is for the beneficial results which will be shared by the sick and afflicted whose sufferings you are supposed to relieve. You may grasp new ideas and meth-

ods of procedure which will be of lasting benefit to unfortunate and suffering humanity.

Now let us get to work, and that quickly, to make this a big meeting, and not only a big meeting, but to make it the best in the history of the Society.

QUESTIONS TO COME BEFORE THE HOUSE OF DELEGATES.

To the Delegates of the Arkansas Medical Society:

Gentlemen, please come prepared to consider the questions that are likely to arise before this meeting. We do not know at the present time what questions pertaining to the profession of Arkansas as have been enumerated by the Secretary will be presented.

One of the questions to be voted on will be the admission of the undergraduate. A resolution was introduced at our last meeting which will come up at this meeting, providing for the admission of the undergraduate. Without pleading the poverty-act, or any selfish motive, it must be admitted that the State Society needs this class of members, and they need the beneficent influences of the Society. However, it is a question to be then decided; and this is written not as from an official member of the Society, but as the opinion of an individual member.

Another thing that may come up will be the endorsement of a medical practice act. We presume that the Committee on Medical Legislation will have in its report some recommendations to make along this line.

Another question will be the endorsement by the State Society of the idea of going before our legislature and asking for a law requiring the registration of births and deaths, which, no doubt, will be embodied in the bill to create a State Board of Health.

The House of Delegates would do well to look carefully into the question of asking the State to build a sanitarium for the treatment of tuberculosis.

It would also do well to look into the idea of asking for a law to prevent the advertising and sale of fraudulent nostrums.

It would likewise be time well spent to look into the matter of suppression of the advertisement of indecencies, such as "safe and sure female regulators," "manhood restored," and the like, and asking for legislation to attain that end.

It would also be well to consider the question of asking for a law permitting only graduates of recognized reputable medical colleges to apply for licenses before the examining board; and prohibiting any who are not graduates from practicing in this State who have not been licensed heretofore.

These questions are given at random as they come up in our mind but may serve as a leader. Others, no doubt, will be presented as suggested.

THE "UNFENCED" AND "UNMUZZLED" MEDICAL EDITOR.

So much now-a-days has been said concerning the unfenced and unmuzzled medical editor. Coupled with nearly all of these articles we find, after reading between the lines an independence of spirit that is backed solely and wholly by the advertisement proposition. In other words, the "unfenced" and "unmuzzled" have patting them on the back a few dollars for advertising.

The American Medical Association never proposed for one instant to fence in any medical editor, or to muzzle any medical editor. It has proposed, however, to lift medical journalism and medical advertising out of the slough of frauds and place it on the plane of honesty. It has proposed to turn on the searchlight to trace out where the frauds are and where honesty resides. The average medical practitioner, and, I might say, all of the medical profession who have not given the subject more than a passing notice, could hardly be expected to draw the line between honesty and fraud in medical advertising, when these two occupy a common space side by side and both proclaiming their merits in and along the same channel. That is why the Council on Pharmacy and Chemistry was organized, and their investigations have been followed out for the purpose of ascertaining what is good and honest and what is bad and fraudulent.

Away with this idea of the editors of the State Journals being muzzled and fenced in. The American Medical Association has not proposed to build a wall around any state journal. Every State Medical Society has a perfect right to say through its committee on publication what shall be advertised and what shall not; or whether advertising at all shall be inserted. There is only one way to settle this question and that is to either do away with the Committee on Pharmacy and Chemistry or to accept its findings. Our Council on Pharmacy and Chemistry is a court, and fortunately, it is a court of the highest and last resort, and composed of men whose reputation for honesty and integrity is beyond question. Then, why not accept their findings concerning fraud? Why advertise a fraud and give it prominence in the face of their condemnation; and why should we use the terms, "muzzled" and "fenced?" If there is any "muzzling" or "fencing" to be done, the only ones who do the muzzling and fencing generally go to the men whose columns are full of the advertisements of this character of frauds, and not to those who are in full accord with the findings of the Committee on Pharmacy and Chemistry.

DR. J. N. McCORMACK, IN LOUISIANA.

Dr. J. N. McCormack, of Bowling Green, Ky., well known to the medical profession of Arkansas, has just completed an itinerary of the State of Louisiana. Our Louisiana brethren are enthusiastic and unanimous in their praise of the work done by Dr. McCormack, throughout the State. His work has extended beyond the confines of the medical profession into that of the legal profession, as well as the laity in general. A noted judge regards his itinerary as one of the most remarkable and praiseworthy methods of imparting valuable information to the laity, and says, that his lectures are full of practical suggestion and abound with startling facts coupled with keen satire and rich humor.

Dr. McCormack is certainly a useful man, not only to the profession but the laity of the United States. His work will be a monument that will be enduring. As evidence of his sterling worth it may be related that when he be-

gan his career in Kentucky, not many years ago, his native state was quack-ridden. To-day not a quack resides within its borders. He has made it so uncomfortable there and the field so utterly unpromising that this class of nefarious workers have folded their tents and sought greener pastures. So much for his work in his old home.

DR. JOSEPH PRICE TO BE OUR GUEST.

We learn with much pleasure that arrangements have just been completed whereby we are to have as our guest at the meeting of the Arkansas Medical Society, Dr. Joseph Price, of Philadelphia, one of the most skillful gynecologists of the country. There is no doubt that numbers of Arkansas physicians will come many miles to see and hear this distinguished medical teacher, who is known from one extreme border of the professional world to the other. There is no question but that Dr. Price stands to-day without a peer, and the Arkansas Medical Society may well feel proud of having as its guest such a notable personage. It is certainly to be hoped that as many of our members as can, will avail themselves of the opportunity to come and hear Dr. Price's paper, which will no doubt be a masterpiece.

HEADQUARTERS FOR THE ANNUAL MEETING OF THE STATE MEDICAL SOCIETY.

The headquarters for the State meeting will be the Hotel Marion. The management of this institution will make every possible arrangement for the comfort and accommodation of the members of the Arkansas Medical Society who wish to stop there during the annual meeting. Remember, however, that you are under no obligations to make your stay at this hostelry. You are at liberty to stop at any other hotel, or any boarding house that you may wish, (and there are a number of good ones in the city). It would be better, however, as we see it, for as many as can, who desire to do so, to register at the Hotel Marion, as you will then be in touch with more of our members than by stopping at various places around throughout the city.

THE MARCH ISSUE.

The President of the Arkansas Medical Society, has just received a note to-day (April 7th), from the Secretary, stating that owing to illness in his family, he will be absent from the city several days, and requesting his assistance in getting out the March issue of the Journal.

We truly sympathize with the doctor and will endeavor to help him out as best we can. We are not in position, however, to give our readers this month a Journal that will reflect much credit on our efforts, from the simple fact that our work is piled up mountain high and we are trying to catch up where we left off six weeks ago. However, we shall do the best we can, asking every member of the State Society to kindly indulge us as much as possible and throw around our shoulders the cloak of charity.

THE CHAILLE MEMORIAL JUBILEE.

It is with great pleasure we note from an exchange the project that is on foot to celebrate on May 19, 1908, the 50th anniversary of the medical teaching service of Professor Stanford E. Chaille, Dean of the Medical Department, Tulane University, which takes place at New Orleans. The Alumni of the Medical Department propose to give this as a slight token of appreciation and respect to the great work of this gifted man and beloved physician, and have sent out a request to the Alumni to participate with them. The details will be announced later.

COMMENCEMENT EXERCISES.

The Commencement exercises of the University of Arkansas, Medical Department, and the College of Physicians and Surgeons will be held on May 1st, and April 30th, respectively. The programs are not out yet, but we presume that the medical profession of the State will be invited to attend these exercises, which will take place in this city.

The classes of these schools this year have been enthusiastic in their work, and will graduate and go forth full of zeal and energy, well-fitted to battle with the professional difficulties that come up in the practitioner's life.

Selections

ANOTHER PATENT MEDICINE VENDOR BROUGHT TO JUDGMENT IN GREENE COUNTY.

The case before Esq. Thompson aroused much interest. The defendant in this case was Dr. A. M. Bochner, the patent medicine vender, who blew into town last week and erected a platform at the corner of the Globe drug store. He is accompanied by a black face comedian and after putting on a show would call attention to the crowd that had gathered to his medicines which he sold from the platform. Local physicians, members of the medical association, filed information against Dr. Bochner for his arrest and he was arrested Friday, after his first sale, and arraigned before Esq. Thompson on the charge of conducting the sale of medicines without a license and without being a registered physician as is required by the state law.

The defendant employed Johnson & Burr to represent him and the physicians employed S. R. Simpson to assist Deputy Prosecuting Attorney Jeff Bratton in the prosecution. The case was argued before a jury which acquitted the defendant on the grounds that the state law conflicts with the commerce clause of the constitution of the United States. He was arrested again Saturday and his attorneys applied to Judge Jason Light for a writ of habeas corpus, but Judge Light refused to recognize the writ on the grounds that the state law is constitutional. The attorneys then offered plans for a compromise and stated that if the matter could not be settled in that manner they would appeal to the circuit court. Mr. Simpson was not in town when the compromise was offered but Mr. Bratton took the matter up with local members of the district medical society and they instructed him to accept the terms of the compromise, which were to the effect that Dr. Bochner pay all costs of the proceeding and discontinue the sale of medicines on the street corner.

The doctor is complying with the compromise, but is still in the city and continues his street corner shows, but for advertising purposes only. He and his comedian give a free entertainment as heretofore after which he gets in his spiel

and then invites those interested into the Globe drug store where the medicine is sold.—Paragould Soliphone Events.

CHANTEMESSE'S OPHTHALMO-REACTION IN TYPHOID FEVER.—Once more we are to see a so-called decisive, pathognomonic sign for typhoid fever go to the wall, and again witness the discomfiting, although not unfamiliar, spectacle of a medical investigator in confusion. As is the rule, the inordinate desire to rush into print with medical novelties, long ere they have had the beneficent seasoning of second thought, is doubtless the undoing of this hasty thesis by Chantemesse. In July of this year, that author reported to the Paris Academy of Medicine that a few drops of typhoid toxins instilled upon the conjunctiva of the lower lid caused a redness and secretion, which reaction he deemed a positive sign of typhoid fever. Still more recently Kraus, Lusenberger and Russ have published a series of results obtained by conjunctival instillation of typhoid toxins prepared according to the method of Chantemesse. In twenty-two typhoid patients, with a positive Widal, they noted a typical reaction in all, within six hours, thus far corroborating the work of Chantemesse. On the other hand in twenty-two patients suffering from various diseases, including pneumonia, multiple sclerosis and tuberculosis, the reaction was observed in 50 per cent. of the cases. That this particular reaction is not peculiar to the typhoid toxins is witnessed by the fact that diluted tuberculin when instilled upon the conjunctiva of twelve typhoid patients produced the typical reaction of redness and secretion in eleven of the cases at the end of eighteen hours. The fact that Chantemesse might, just as well as not, have made these control-tests himself, all the more emphasizes the shortcoming. In general, such research is, at best, disconcerting; although, in the tolerant spirit of the day, it should not be altogether decried, since oftentimes even faulty work has its suggestive value.—*N. Y. State Jour. of Med.*

TUBERCULOSIS OF THE PERITONEUM.—McMurty in speaking of the diagnosis of tuberculosis in *Cleveland Medical Journal*, January, says, "The great difficulty of accurate diagnosis

in the early stages of peritoneal tuberculosis places an insurmountable obstacle in the way of early treatment, especially as regards the utilization of those hygienic measures which are so efficient in arresting and curing tubercular infection in other parts of the organism. A positive diagnosis is rarely made in any stage of the disease before resort to abdominal section. I have endeavored faithfully to utilize the various diagnostic signs in my experience with this disease, and have been impressed with their total inadequacy in the early stages. The peritoneal thickening described by Edebohls, the brown discoloration of the skin mentioned by Osler, the vaulted abdomen, the doughy sensation on pressure, the intermittent temperature, etc., described by others, are not sufficiently pathognomonic to establish diagnosis. It is when the disease is so advanced that gross lesions simulate the familiar intraperitoneal diseases, that the surgeon usually sees the patient, and then positive diagnosis, as a rule, is established by operative intervention."

IN TUBERCULOSIS OF THE PERITONEUM.—

Among the sources of infection in tuberculosis of the peritoneum consideration must be given the ingestion of infected food materials. While Koch has negated the long accepted belief in infection from bovine sources, the researches of others tend to reestablish the fact that milk from tuberculous cows is a prolific source of infection in man. After a careful study of the researches made on both human and animal subjects, I am convinced that tuberculosis is transmitted to the human subject in this way. My own observations clinically have impressed me with the greater prevalence of abdominal tuberculosis in the rural districts, where uncooked milk is an almost universal food.

TREATMENT OF PNEUMONIA ESPECIALLY BY OUTDOOR AIR.—Thompson refers to 128 cases of acute lobar pneumonia treated in the Presbyterian Hospital in New York in 1906, of which number forty-seven patients among those who recovered received no medical treatment. They were either on the roof or in small rooms in which the windows were constantly open.

The author thinks the only rational treatment of pneumonia is the symptomatic one, and that in every case an abundant supply of fresh outdoor air is the first requisite. He thinks this method of obtaining oxygen infinitely superior to obtaining it from a metal cylinder after being superheated and then blown through stale water and an unpleasant rubber tube. He thinks the fear of the draught in the case of pneumonia is due to prejudice or inexperience. The open air treatment will not cure all patients with pneumonia, but it will do more for most of them than drugs. At the same time there are certain symptoms which call for the use of drugs, and when such symptoms are apparent the proper drugs should not be withheld.—*Amer. Jour. Med. Sciences*—*New York Med. Journal*.

URINE OF PREGNANCY.—J. Clifton Edgar (*N. Y. Med. Jour.*, Aug. 10, 1907) has found that low urea percentages fail to give reliable evidence of kidney failure or faulty metabolism. The presence of albumin in the urine especially where accompanied by casts is of more importance than in the nonpregnant state. The albumin may be the only diagnostic sign of the presence of a defective kidney condition, a chronic or an incipient nephritis, a danger signal that the preëclampsic state is already present or that eclampsia itself is already imminent. Albumin and casts in the urine appear to be the result of a pregnancy toxemia as indicated by a faulty urinary excretion of nitrogen. The nephritic condition appears to be the result and not the cause of the toxemia. In toxemic vomiting of pregnancy albumin and casts do not usually appear until the terminal stages of the disease and then without any accompanying edema. Large quantities of indican may result in nephritic changes and the appearance of albumin and casts. In other words the nephritic condition may be the result and not the cause

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of intestinal intoxication. Another sign in the urine of diagnostic value is the relation of the nitrogen of the nitrogenous compounds of the urine to the total nitrogen. The persistent vomiting of pregnancy is with few exceptions toxemic in character, as shown by faulty urinary excretion of nitrogen. We can usually distinguish between two varieties of pre-eclamptic states, the first largely toxemic (hepatic, peculiar to pregnancy) in character and the second nephritic. In the first variety albumin and casts and a diminished amount of urine are not prominent symptoms, but the proportion of ammonia nitrogen and undetermined nitrogen is high and that of urea nitrogen is low. In the second variety there is an increasing amount of albumin and casts in the urine, with a diminution in the amount of urine. There is little change in the urinary nitrogen. This latter variety more readily yields to treatment and gives a better prognosis.—*American Journal of Obstetrics*.

BLISTER SIGN OF DEATH.—Dr. Ott of Lillebonne has found the "explosive blister" a valuable means by which to distinguish between real and apparent death. He has simplified Marteno's technic and has found the test practicable and reliable. The forearm is drawn out horizontally, allowing sufficient space between it and the ground for a candle. The flame of the candle or of a taper or match is then held beneath it, allowing the flame to touch the skin on the anterior aspect of the forearm. In a few seconds an air blister forms and bursts, but there is no fluid. If the person is still alive, an ordinary blister inclosing serum forms instead of the dry explosive-gas blister.—*Gaz. Med. Belge*, Feb. 22.

THE USE OF RUBBER GLOVES.—In this paper (*Medical Record*), Morris decries the use of rubber gloves in surgery. He declares that it leads to slow work, necessitates long incisions, and reduces the natural resistance of the patient. He believes, however, that rubber gloves may be useful in the following conditions: 1. When there is no infection or other condition to call out the patient's natural resistance to infection. 2. When dressings are to be changed for several patients in succession, or when the

surgeon operates on an uninfected patient shortly after operating on an infected one. Rubber gloves, Morris declares, are not needed: 1. When infection is already under way and the patient has developed his own protection. 2. When a disease like cancer has called out such a degree of protection that it would be almost impossible to infect the patient. 3. When no infection or other disease is present, but when slow or extensive operating necessitated by clumsy gloves will allow more bacteria to fall into the wound than would be carried in by well-prepared bare hands.—*J. M. A.*

CONSENT TO OPERATION.—The decision of the Supreme Court in the case of Pratt vs. Davis emphasizes the necessity of surgeons having a clear understanding of their legal liabilities in undertaking important operations and the prudence of requiring explicit consent of the patient or his legal representative before beginning an operation. The decision covers three principal points of interest to surgeons: 1. What is sufficient consent to an operation? 2. How much is implied in consent once given? 3. What is the privilege and duty of a surgeon in emergencies arising in the course of an operation undertaken with previously obtained consent? When a patient is in full possession of his mental faculties his personal consent to a surgical operation on himself is a necessary prerequisite. It is obvious that this consent should be obtained after a clear presentation of the necessary facts in the case, and it would seem to be a judicious precaution to obtain such consent in writing. Unfortunately, the testimony in the case cited showed an attempt at deception that seems to have been imprudent even if it might at the time have seemed justifiable. It would appear from the decision that whatever may be the implication involved in consent to one operation, it can not be held to extend to a second operation, but explicit consent to this should be obtained. The decision on the third point is of great importance as it tends to put the duties of the surgeon in the course of an operation already undertaken in a clearer light. It is the duty and the legal right of the surgeon in the presence of unexpected conditions

arising in the course of an operation to use his highest skill and judgment even if the consent of the patient or of his representative can not be obtained. It is also right and the duty of the surgeon to act in accordance with the best teachings of surgery in emergencies in which consent can not be obtained, even to the extent of performing operations.—J. A. M. A.

CIRCULATORY HYPERTENSION.—Deaver (*N. Y. Med. Jour.*) in speaking of the treatment of circulatory hypertension, says: "As to drugs, the iodides, in small doses, long continued, seem to belong among the preventive measures. Their action is little understood, but probably affects the nutrition of the vessels. Animals given adrenalin injections are said to develop arteriosclerotic changes more slowly when iodides are given simultaneously. They have no direct effect on blood pressure.

TONSILLOTOMY OR TONSILLECTOMY.—For a long time tonsillotomy has been one of the most commonly performed of all of the operations upon the human body. It is the one operation least confined by specialism, and is performed by the general surgeon, the laryngologist and the general practitioner, we may say, with almost equal success. Within recent time the laryngologist has begun to deprecate the operation, and to advise and practice complete removal of the tonsils instead of simply amputating the part projecting medianwards beyond the pillars of the fauces.

In an article on tonsillar hemorrhage Chevalier Jackson makes the statement that few operations are so generally badly done as those upon the tonsils, and that tonsillotomy is an utterly unjustifiable operation. He shows that nearly all operators at the present time slice off the projecting portion of the tonsil with a tonsillitome or other instrument apparently with the idea of ridding the patient's throat of the mechanical obstruction of the projecting portion. This operation, he says, closes up the glands of the deeper portion of the tonsil under the scar tissue, which forever interferes with the function of the remaining portion and leaves the patient in most cases worse than before; and patients who have had periodical at-

tacks of acute tonsillitis will have them more often than before, and "rheumatism," infective arthritis, endocarditis, and a host of other ills which have been traced to the tonsils are made worse or their occurrence is rendered more likely by removal of a part of the tonsil. It is advised that the proper and surgical way to remove the tonsil is to dissect it completely out of its capsule. When this is done there is less likelihood of hemorrhage, the operation has accomplished a cure of the conditions at which it is aimed, and above all it differs from tonsillotomy in that it has not engrafted another pathological condition upon the tonsils.

This question as to which is the better of these operations should be settled by the laryngologists. The principles above enunciated are not without good foundation, and we are prepared for the conclusion that they are correct. *N. Y. State Jour. Med.*

THE HYPODERMIC USE OF QUININE.—In an article on this subject in the *Indian Medical Gazette* for May, 1907, Symons fully indorses the efficiency of administering quinine "with the needle." Since his connection with the General Hospital at Madras, as fourth physician, some four years since, he has always given quinine by this method, and has only seen one bad result, in the shape of a superficial abscess. The salt used is the acid hydrochloride of quinine, which will dissolve in equal parts of distilled water. This solution is made up in the dispensary of the hospital, in an ounce bottle, and used when required.

The technique is as follows:

1. A small hypodermic syringe is used, the needle of which is sterilized by boiling for two or three minutes in a test-tube. The syringe is washed out with 1-in-20 carbolic lotion by means of drawing up some of the solution into the syringe three or four times. A small spoon is also placed in the 1-in-20 carbolic lotion, and is used to receive the quinine lotion when it is poured out from the bottle previous to changing the syringe. The glass stopper together with the neck and mouth of the bottle are thoroughly cleaned with a sponge dipped in 1-in-20, and the parts into which the

solution is to be injected is, of course, prepared in the usual way. The author considers all the above details absolutely essential, especially the cleansing of the bottle—a point likely to be forgotten.

The dose is 10 minims, equal to 10 grains of the salt, intramuscularly in the deltoid muscle. If it be given hypodermically, trouble in the shape of a superficial abscess may arise—never, however, when introduced into the muscle. As to tetanus, such a disease should never deter one from intramuscular injections if the above precautions are taken. The author asserts he has been injected in the deltoid on many occasions about 10 a. m., and has played polo the same evening, which speaks for itself as regards local after-effects.

Sometimes a slight aching sensation occurs whilst the solution is being injected, but it passes off immediately.

In the author's opinion there is no comparison in the two methods—i. e., by injection and mouth. By the former method we make absolutely sure of the patient receiving the dose of quinine which is administered, and we do not derange the digestive organs. The patient comes quickly under the influence of the drug—a very important factor in "malignant" cases. The temperature comes to normal in twenty-four to thirty hours and stays there. In his wards the usual practice is to inject on three successive days and then on alternate days for the week to make sure of the patient being quininized.

The author has never observed symptoms of cinchonism from this method. He adds that all the cases are diagnosed by the finding of the plasmodium malariae before the quinine is given, even if it means the patient remaining a few days in the wards before he receives any specific treatment.—*Therapeutic Gazette*.

THE BIER SUCTION TREATMENT OF TUBERCULAR SINUSES.—Sever (*Boston Medical and Surgical Journal*, June 6, 1907) records sixteen cases suffering from tubercular sinuses treated by Bier's suction method. By this treatment he notes that the contents of abscess cavities are completely drained off, thus removing the pus, and that the vacuum causes a hyperemia which stimulates the healing process. The cups

are very small, circular ones of glass, about 1 1-2 inches in diameter, 2 inches in height, with the top tapered to fit a rubber tube with a rubber bulb. The cup is applied wet, the bulb being compressed at the time, thus creating a vacuum, which is of great enough degree to cause the cup to stay in place.

Where this was applicable the cup method was supplemented by the compression bandage—for instance, when the abscess involved the knee, elbow, hand, or ankle.

The treatment was carried out daily for one hour at a time, nor was the suction strong enough to cause pain. Every few minutes the cups were removed to clean them, and to renew the vacuum. Where the compression bandage was used this was left applied throughout.

Several cases, including those in which hemorrhage occurred, either lost ground in general condition or did not gain at all, but promptly improved following the omission of the treatment.

At first there was a considerable increase in the amount of the discharge, which later diminished. In some cases the discharge remained more abundant than before the institution of the treatment. The author notes that in a number of cases the condition was improved both generally and locally. Half the cases were either wholly healed or markedly improved. In five the conditions were not apparently improved locally, but there was distinct gain in weight and color-index. Three cases lost ground to such an extent that the treatment had to be omitted. The improvement in their local condition was largely due to the cupping, seconded by the improvement in their general condition.

The occurrence of hemorrhage was noted in but two cases. When the sinuses were of long duration they were less benefited than those of comparatively recent cases.—*Therapeutic Gazette*.

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Communications

DR. STEPHENSON'S WESTERN TRIP.

Little Rock, March, 1908.

To the Editor:

As requested, I take pleasure in giving you a brief outline of my recent visit to California, touching only the things that relate to the medical profession. While the trip was full of interest from the beginning to the end, yet, I will take it for granted that your readers do not care for anything except the medical side of the itinerary.

We left Little Rock on Monday afternoon, February 24th, at 4 o'clock, arriving at New Orleans next day at 11 a. m. It was my good pleasure to visit a former instructor while there, Dr. Henry Dickson Bruns, whom for years I have admired for his skill as an oculist. Dr. Bruns is surgeon in charge of the Eye, Ear, Nose and Throat Hospital at New Orleans. The doctor received me kindly and cordially and manifested quite an interest in the medical profession of Arkansas. He told me that the Eye, Ear, Nose and Throat Hospital had just recently completed a magnificent building, and had only moved into it the day before I arrived. He regretted exceedingly that my time was so limited that he could not have the opportunity to show me through this thoroughly-equipped and well-appointed building, but he said that they now had just what they wanted. This institution, it will be remembered, is now part of Tulane University, the Polyclinic and Tulane having come together on agreeable terms. I saw other physicians there, but it being only one day before Mardi Gras, I did not intrude myself upon them, owing to a lack of time. I particularly desired to see Dr. Bruns, as he was my first instructor in diseases of the eye.

We left New Orleans the day before Mardi Gras. Having witnessed this brilliant spectacle on a previous occasion, its repetition most likely would not have presented anything new or strange and, besides, our time was more precious than the sights of Mardi Gras would have been interesting.

For three days and three nights our home was in a Pullman car. We arrived at Los Angeles

safely Sunday at 12:45 o'clock. Here we stayed two weeks, visiting the various beaches and places of interest that are attractive to tourists. It was our good pleasure to go through the California Hospital, an institution owned by the physicians of Los Angeles. Here we witnessed a hysterectomy successfully performed by our own Dr. E. D. Jones, formerly of Russellville, but recently removed to Los Angeles. Dr. Jones is now Professor of Physiology in the College of Physicians and Surgeons at Los Angeles. The internes at the California Hospital remarked to me: "If all your doctors in Arkansas are like Dr. Jones, you are certainly a 'crackerjack' lot of men." I promptly informed him that we had plenty more just like him. Incidentally, while Dr. Jones was not listening, they unhesitatingly informed me that he was a coming man, and I am prepared to believe every word they said from what I saw of him while there. Dr. Jones is an exceedingly busy man. On the invitation of Dr. Jones we visited the College of Physicians and Surgeons and while there, at his request, filled his hour with a lecture to his class. We found a magnificent school, fully equipped in every respect. This school is a four-year school and belongs to the Association of American Medical Colleges. We called also on Dr. Lindley, editor of the Pacific Medical Monthly. Unfortunately the doctor was out of the city. We also called on Dr. M. J. Barlow, Dean of the Medical Department of the University of Southern California; but we were disappointed in seeing him, on account of his absence from the city.

Calling at the office of Drs. Rogers and McCoy, we found them exceedingly pleasant and very busy. Dr. McCoy has a hobby for building houses as a pastime. I told the good doctor that we had too few of his tribe. Dr. McCoy is Professor of Ophthalmology in the P. & S.

We called on Dr. H. Bert Ellis, professor of Ophthalmology in the Medical Department of the University of Southern California, a genial and whole-souled gentleman, who has held numerous positions in the gift of the profession.

We called at the offices of Drs. Church and Oldham, particularly to see Dr. Oldham, a nephew of our beloved ex-president of the A.

M. A., Dr. J. M. Matthews. He had written us that he expected to be in Los Angeles and we could find out if he were there by calling at Dr. Oldham's office. We regretted very much that Dr. Matthews had, for some cause or other, failed to come, up to the time we left.

The practice of medicine in Los Angeles is marked by up-to-date business methods. All the offices that we visited were modern in every respect, all in fire-proof buildings with tiled floors, concrete walls, hot and cold water, furnished by the building to the tenants, janitor service free, and enough heat when necessary. Mail chutes are in the office buildings on each floor, making it very convenient for the number of occupants of these offices having much mail-matter to deposit, it only being necessary to go into the hall for this purpose. All the physicians that we met seemed to be healthy, happy and prosperous, and in fact, they say that their business is nearly all cash, the majority of the people pay without having a bill sent to them.

Gold is the money of the country. Paper currency in small bills is as much of a curiosity as the larger denominations of gold pieces would be to us.

We visited the Los Angeles County Medical Society at its regular meeting. They have a splendid hall on Broadway, second floor, where they meet every Friday night. The Society is composed of 408 members, and is divided into sections. The general society meets every week, and the section work meets twice a month. We were very much impressed with the thoroughness of the work done. While the attendance was exceedingly small on this particular night, they told me that the week before the attendance was something like 200. The meeting, however, was full of interest. Three clinics were presented. The physician in charge outlines the case, with its treatment, making such points as he thought unusual or of striking interest. The president appointed some one to take the lead discussing the case. In making this appointment his selection was one who was making a special study, or had made a special study on this line of troubles. After the leader finished discussing the clinic, then it was a free-for-all affair, every one being privileged to say what he

thought about it; and to my great surprise every man had something to say. One of the clinics was a case of suppurative pleurisy, in which a resection of the rib had been done. Another case was a continued fever following an accouchement. This fever lasted seventy-eight days. The attending physician came prepared with the temperature-chart from the hospital, which had been carefully made and enlarged so that it could be tacked upon the wall. The temperature in this case was exceedingly interesting, as the fluctuations resembled very much the excursions made in a temperature of a malarial type; but we were assured that repeated blood-counts failed to reveal the plasmodia malariae. This case consumed almost the entire time and was of most absorbing interest.

The President of the Arkansas Medical Society was cordially received and at once introduced and called upon for a message from *Arkansas*. It was our good pleasure to make correction of this faulty pronunciation, informing the gentleman that an act of our legislature had made the pronunciation plain *Arkan-saw*. After a few remarks, it was our pleasure to form the acquaintance of quite a number of the gentlemen present.

Dr. F. M. Pottenger of Monrovia, who is a leading man there in the treatment of tubercular troubles, is an exceedingly pleasant gentleman, who has won his way to the very top-most rounds of the ladder. He has an office in Los Angeles.

Dr. Ellerson is looked upon as being a man of rare ability in diagnosis, and is an exceedingly pleasant gentleman. Diagnosis is his hobby—a splendid fault to possess.

Another physician, whose name we do not recall, is undoubtedly the Chesterfield of medicine of the Golden State; as it was told to us quite a number of times, while out there, that this good brother was always exceedingly particular

Remember the date, the time, and the place. Annual Meeting of the Arkansas Medical Society, May 13, 14, 15, Auditorium (Skating Rink), West Markham Street, Little Rock. House of Delegates meets on Tuesday, the 12th.

in every detail while in the presence of a professional brother—so much so, that he was termed the man of “magnificent apologies”; in other words, he was always afraid that he was going to do or say something that might ruffle a brother's feelings, and for that reason was always exceedingly and apprehensively nice to every one! A splendid fault and worthy of emulation.

We visited Dr. F. C. E. Matison at Pasadena, recently appointed as a member of the State Board of Medical Examiners, and found him a most genial, whole-souled gentleman; and as usual with the other physicians whom we called upon, his reception-room was full of patients awaiting his arrival. Quite a number of the Pasadena brethren, whose names we do not recall, were more than pleased to extend the glad hand to us and extend every possible courtesy.

Leaving Los Angeles, we went to San Francisco, stopping enroute to visit Palo Alto, the site of the great Leland Stanford University, one of the grandest in the world. Senator Stanford, as you all know, built this magnificent structure as a memorial to his son, Leland Stanford, junior, who died of mountain fever while traveling in Italy. It comprises 8,300 acres, and is a veritable park. The University cost \$33,000,000. The Leland Stanford Memorial Church cost one and one-half million dollars. The front of this building is of mosaic work. Solid gold, 18-carat fine, is used in the adornment of this front to the extent of thirty-three thousand dollars' worth.

The largest organ in the world is here, and until the recent earthquake, visitors were permitted to hear the magnificent tones of this grand instrument every day at a stated hour. The earthquake demolished the building to such an extent that it is closed, and the organ is now only used for the instruction of such pupils as are taking lessons on the pipe organ. By an accident, Mrs. Stephenson and I were in the building while a lesson was being given, and, of course, heard them playing.

We visited the tomb containing the remains of Mr. and Mrs. Stanford and their son. Two girls and two boys from the university are designated on alternate days to place flowers at this tomb. This magnificent mausoleum cost \$650,-

000. Here, again, the master's art is displayed in architectural beauty. I might say here of the architecture of this institute of learning, that the building was done by masters from all over the world. It made no difference where an expert in a certain line lived, his services were secured, and he was brought to Palo Alto to undertake the work, regardless of cost. The result is some of the grandest displays of workmanship that ever adorned a building. It is regrettable to know that these magnificent buildings have been so badly damaged by the earthquake. The library that cost \$3,000,000, was just completed and ready for occupancy; but just then it fell, a prey to the ravages of the earthquake, and nothing remains of this magnificent and commodious structure, except the steel supports and the top of the dome. It is all one shapeless mass of ruins. The gymnasium was also destroyed, absolutely, and the memorial arch at the entrance, costing \$135,000, was laid low. The entrance to the memorial church, and another magnificent arch costing \$33,000, was entirely ruined; nothing except the pedestals remaining. It is a consoling fact to know that the restoration of these magnificent buildings is in progress and the work already being rapidly pushed forward on those most needed.

Palo Alto is only one hour's ride from San Francisco. Arriving there we hunted up our genial friend, the Secretary of the State Medical Society of California, Dr. Philip Mills Jones. Those of our readers who have read the Journal of the American Medical Association very much have seen his name in connection with the fight that he has been waging on the nostrum business.

The San Francisco doctors are again getting on their feet, the earthquake, in a great many instances, having utterly ruined and destroyed the labors of years. We know of no better class of professional men living on the face of the earth; full of energy; with an abiding faith in the future of San Francisco, they “arise from their ashes greater than ever.”

The medical profession of California seems to be united, and particularly is this true of the effort to drive out the quacks. They told us in

Los Angeles that \$1,400 in fines had been imposed upon the shysters and pretenders and a relentless war is being waged with this money; the proceeds of every fine being used to prosecute another violator.

We did not visit Cooper Medical College, nor the University of Oakland, not having the time at our disposal. We did, however, visit the University of California at Berkeley, Literary Department. Here we saw the great colosseum presented to this institution by Mr. W. R. Hearst, of New York, modeled after the Colosseum at Rome. It is built of concrete, seats approximately ten thousand people, and cost about one hundred thousand dollars. This was the largest Amphitheatre and was used for combats of gladiators and wild-beast fights. In the theater where plays were performed, the seats faced the stage in a half-circle. In the amphitheatre the seats entirely surrounds the place of performance, hence the name *amphi*, meaning all around. The colosseum being the largest of these buildings, is the best preserved and one of the most interesting ruins in the world. It was begun by Vespasian and finished by Titus, A. D. 80. When it was dedicated by Titus 5,000 wild beasts were slain and the games lasted one hundred days.

The University of Oakland, Medical Department, is a four-years' medical college, limiting its classes to ten for each class, only forty being allowed to attend.

We had a two-days' pleasant visit in Oakland, and while there, had the good fortune to meet Dr. C. L. Tisdale, Secretary of the State Board of Medical Examiners for California, who invited us to take luncheon with him at the Elks' Club. We found him to be one of the most genial, attractive and elegant gentlemen we have met in a long time. Dr. Tisdale promised to visit us on his way to the East this summer, and we assured him that the "latch-string" of the medical profession of Little Rock would be on the outside of the portal, and we would endeavor to show him every courtesy while among us.

We made a trip from Oakland up Mount Tamalpias, one of the great wonders of the world, supplemented by a visit down the mountain

among the great redwood trees of Redwood Canyon, recently presented to the United States Government by Mr. Kent, of Chicago, and accepted by President Roosevelt. This is now a National Reserve and those towering redwoods will be spared the destructive onslaught of the lumberman's axe. These magnificent specimens of the forest stand from 300 to 400 feet high, as straight as a line; but they are small in comparison to some of the redwoods that we saw on our visit two years ago.

Ten o'clock, p. m., homeward bound, we retired to rest, after spending two and a half weeks in a delightful clime, amid flowers and orange groves, full of orange blooms and ripe fruit. Next morning we awoke to find ourselves in a terrific snow-storm! All day through the snow we journeyed, till arriving at Kansas City, we changed cars for Memphis. Next afternoon found us safe at home, where we found all well.

C. C. STEPHENSON, M. D.

TUBERCULOUS SPUTUM TREATED WITH BICHLORIDE SOLUTION.

Camden, Ark., March, 1908.

To the Editor:

I may be "behind the procession" in what I am about to write, but if to microscopists and bacteriologists, this is unknown, then I wish you to publish the statement I am about to make.

For the last ten years I have done considerable work with the microscope in the way principally, of examining sputum for tubercle bacilli. As my own family, including myself, had shown a decided predisposition to develop this "Great White Plague," I have always been very careful in disposing of the sputum after the examination was concluded.

When the weather was warm, and no red-hot stove convenient, I usually covered the remaining sputum with a 1-1000 or 1-500 bichloride of mercury solution for 24 hours before casting it away. On one occasion it occurred to me to prepare a slide and stain with carbol-fuchsin after this submersion. To my surprise, I found the bacilli fully as well, if not better, stained than in natural state. Since then, after finding the T. B.'s. I have a number of time treat-

ed it the same way and afterwards found the germs equally stained.

Not long since, I mentioned this to a young friend, Dr. McGill, of Chidester, Ark., and gave him a specimen of sputum known to contain tubercle bacilli. He readily found these germs in the fresh specimen, and then kept the remainder covered with a 1-500 solution for one week, and the bacilli were, after the usual method, as quickly and clearly stained as from the fresh specimen.

I consider it a contribution of some value to our knowledge, if not already discovered, to be able to render tubercular sputum non-infectious before handling it, and not impair its staining properties.

Yours respectfully,

J. W. MEEK, M. D.

SHOULD THE UNDERGRADUATE BE ADMITTED TO FULL MEMBERSHIP TO THE COUNTY AND STATE SOCIETY?

This proposed amendment was introduced at the request of several of my friends after several conferences. The object is to give the undergraduate all the benefits of membership without allowing them to control the society. He may attend meetings of the county and state societies, read and discuss papers, express his opinions on proposed legislation, in fact have all the privileges of membership, except that of voting. I insist on this point as I feel that it would be a great step backward to permit the uneducated element to gain control of our organization. If we expect to benefit the profession as a whole, put ourselves in better position to serve our people, secure proper laws, in fact to carry out our stated object, we must have the strong men of the profession with us. In saying this, I am well aware that some undergraduates are well-informed, up-to-date, progressive practitioners, but I am also aware that it is *only a very few*. The very fact that they are undergraduates shows conclusively that they do not realize the wide range of modern medical education. How then may we expect them to help us put our local profession on a higher

plane? For the same reasons they fail to realize the importance of wider medical legislation. If you doubt this, examine the record of the great majority of undergraduate physicians who have been members of our legislature. When we consider that these men have been in frequent contact with our societies, can we hope that the fact that they are given control of these societies will change their every idea? I am creditably informed that a certain undergraduate physician, who became a member of a recent legislature, promised his county society to uphold the bills proposed by the medical societies, but when the time came he voted and worked against all of them. This man was a constant attendant on the meetings of his county society, in fact, practically a member. Of course he is now a "political corpse," but this shows how much influence we may expect to hold over these men. By this plan of associated membership and, if they are in good faith, they will join us in the method proposed and prove their full fitness for full and complete membership. They will get all the good of the scientific program, and have a voice in legislation proposed.

They may, if they so desire, get all the good from the scientific meetings, and become educated to the point of becoming full members later. But, while there still remain in our State many counties in which the undergraduates greatly outnumber the graduates, it is well to make haste slowly. Let us take them partially in, take them on probation, and later, when they are better qualified we may give them full membership. It is objected by some that these gentlemen will resent this restriction and will not attend the meetings. In reply, I think the honest, hard-working, earnest undergraduate, the class we want, will gladly take advantage of this opportunity. In closing, let me say that I consider this society and our county societies as scientific organizations and not political parties. In my home county we have always been able to sway our legislators by reason, and have not resorted to threats of political downfall. Of course, if we consider political supremacy the great thing, if we needs must carry primaries and control general elections, the greater our number of any kind, the more marked will be

our success. But if we expect to continue truly scientific organizations let us not too heavily encumber ourselves.

Now as to the proposed amendment removing the restrictions on the election of delegates to office. This clause has long seemed to me to be unjust, and as I will show, it may be easily perverted in such a manner as to harm both the society and some individual member. For instance, at the last meeting (1907) of the state society a certain gentleman informed me that he had been considered "presidential timber" by some of his friends, but a fellow-practitioner in his home town, knowing this, had him elected delegate, thus in the guise of honoring him, effectually disposing of his candidacy. I am firmly convinced that this gentleman was mistaken, yet the fact remains that this clause of the constitution would readily permit such a practice.

Again, at another meeting of the state society, a certain member was highly spoken of for the presidency; in fact, was apparently the leading candidate, when the fact became known that he was the only member present from his county. Notwithstanding the fact that he was not the regularly elected delegate he took his place as delegate, and performed the duties of that place, thus becoming ineligible to office. Had there been another member present from his county I am convinced that he would have been elected president, at least, the nominating committee would have reported favorably on his name.

Thus we have two examples of the harm that may come of such a law. In my opinion the selection of officers should be left as unrestricted as possible. The membership is certainly able to judge a man's fitness, worth, and qualifications, whether he is a delegate or not. This clause is supposed to prevent one trading votes and working to his own interest, but it is hardly conceivable that one who would do this could wield any influence anyhow.

The state constitution was sent out by the A. M. A. with instructions to modify it to suit local conditions. It was not intended to be swallowed whole, and while it may work admirably as it is in thickly populated states, we have

found it necessary to introduce some marked changes heretofore, and both these proposed amendments will, in my opinion, aid us to better and more harmonious work.

F. B. Young, M. D.

TO OWN OR NOT TO OWN AN AUTOMOBILE, THAT'S THE QUESTION.

Little Rock, March, 1908.

To the Editor:

Do Little Rock physicians need automobiles? If this question is asked one of them who has owned a machine, he will answer, "No." But if the same question is propounded to one who has never owned one, he will answer, "Yes."

The fact that more physicians have not owned a machine than have, will give us a large majority who will answer the question in the affirmative. Majorities rule in this country, not because they are always right, but rather because, like the boy who was spanked by both father and mother, they outnumber the other side.

Some of the advantages which accrue to the physician who owns a machine may outweigh those which come to the physician who does not own one, but of this we are in doubt. It is true that he can get there quicker in a machine, provided it will go the whole journey; if not, a good horse will beat it badly.

But then, who ever got there first? We never did; not, because we are slow, but in these days of rapid transit, and the telephone, when anything of importance does occur, every woman in the neighborhood rushes to her 'phone and hurriedly calls her physician, whose office, like the grocery, is just around the corner, so that when you arrive, whether on foot, in a buggy, street-car or automobile, you find that several have preceded you, and you are suddenly confronted by a red line of ethics which forces you to retire under fire, which to a physician is never pleasant.

A machine has its disadvantages. It is uncertain as to its staying powers, except when it quits; also it is greasy and smells of gasoline and hot oil, which get on our hands and clothing. These odors are disagreeable to our patients,

not because they are so rank, but because they are unfamiliar to the average olfactory apparatus, and therefore disagreeable. But some one will say that a horse also is odorous. Granted, but is not his ammonical odor a pleasant one compared with that of gasoline and hot grease?

We have never owned a machine, but have had dreams of them, and only the other day these dreams were rudely jostled by a trip in an automobile in which we occupied a rear seat in a big car, by the side of a lady who had on a "Merry-Widow" hat. We fairly flew up Fifteenth street to Gaines, then south to Wright avenue. The latter part of the trip was much like a voyage across the English channel, only we were more often separated from the automobile than we would have been from the ship in the channel, and getting back to the automobile is not easy, because it is apt to meet you on the way coming up as you are going down, and you are both surprised.

We were unable to determine whether the feeling of *mal de mer* experienced was due to the speed of the machine, its odor, or the "Merry-Widow," but have about decided that it was due to the misappropriation of the vehicle tax which was put upon us a few years ago with the promise that it would be spent on the streets of the ward from which it is collected.

For the individual physician to determine whether or no he needs an automobile, let him take a spin in one over the average street of our beautiful city, and when he gets back to his office, if he ever does, he will know the mental agony of Richard III. when he cried, "A horse! A horse! My kingdom for a horse!"

Respectfully,

K., U. S. D. M.

Remember the date, the time, and the place. Annual Meeting of the Arkansas Medical Society, May 13, 14, 15, Auditorium (Skating Rink), West Markham Street, Little Rock. House of Delegates meets on Tuesday, the 12th.

District and County Societies

BAXTER COUNTY.—The Baxter County Medical Society, not yet two years old, but one of the most progressive in the State, held its regular monthly meeting at Cotter on the 10th. Those present were: Drs. Hipp, Simpson, Thompson, Weast and Morrow.

The minutes of the last regular meeting were read and approved. The regular order of business was dispensed with and clinical cases were reported by Drs. Thompson, Weast and Simpson.

SNAKE-BITES AND OSTITIS.

Dr. Thompson reported the case of a woman 65 years old, who had been snake-bitten on the foot some twenty years previously. The leg had been injured by a fall in 1907, and six weeks ago began to swell. It is now twice the size of its fellow, and pits on pressure. There is tenderness over the middle of the tibia near where it was injured. She complains of a crawling sensation in the leg and suffers great pain at night.

PRECOCIOUS DEVELOPMENT.

Drs. Thompson and Weast reported the case of a girl who began to menstruate at the age of six. The periods were regular at first, but are now becoming irregular. The pubic region is covered with hair and the breasts are well developed. Her abdomen seems to be as large in proportion to her size as a woman's abdomen at the ninth month of pregnancy. The umbilicus is everted. The abdomen seems to be gradually enlarging. Urine normal, Ascites and pregnancy have been excluded. The child seems to be in good health, has good appetite and enjoys childish sports.

SUDDEN DEATH IN AN OLD MAN.

Dr. Hipp reported the case of an old man 68 years old, who had been in ill-health for six weeks. He had retention of urine and was semi-conscious when first seen. One-half gallon of urine was drawn, after which he seemed better. He ate his meal and died suddenly, eight hours after the urine was drawn.

CARCINOMA OR FIBROID.

Dr. Simpson reported the case of a woman 65 years old who, on account of an injury sus-

tained twenty years previously, has had prolapsus uteri ever since. Three months ago she began to have hemorrhages from the uterus, which have continued ever since.

LOCOMOTOR ATAXIA.

Dr. J. I. Thompson reported the case of a woman 55 years old, who had contracted syphilis in 1889. Last summer she began to develop symptoms of ataxia and now has occasional pectoral crises. Her heart shows decided weakness.

PUERPERAL PARAPLEGIA.

Dr. Weast reported the case of a woman 35 years old who, during the sixth month of pregnancy, suddenly became paralyzed in the lower extremities. Her confinement which occurred at full term was normal, but she has not regained use of the limbs, now six months since delivery.

Dr. Weast also reported the case of an old man 70 years old, who had a fight about the middle of January. He was struck on the head and lower jaw by his assailant who held a closed pocket knife in his hand. He was also kicked in the right side below the ribs. He was seen by Dr. Weast five weeks after receiving the injuries, was unconscious, spitting up blood, and died one hour later. No autopsy was held.

This case was of local interest because the old man's assailant was tried and fined for an assault at the February term of the Yellville Circuit Court, without a physician having examined the case.

YELL COUNTY.—The new Board of Health for Yell County is composed of the following well-known physicians:

Dr. J. R. Linzy, President, Dardanelle; Dr. John Grace, Bellville; Dr. J. N. George, Birta.

Dr. Linzy, Secretary of the Yell County Medical Society, reports a few cases of smallpox in the county—one case in Dardanelle.

SALINE COUNTY.—The Saline County Medical Society met at Benton on the 3rd of March and elected the following officers:

President, Dr. C. J. Steed, Hurricane; Vice-President, Dr. Dewell Gann, Benton; Secretary,

Dr. J. M. Phillips, Benton; Delegate to State Society, Dr. J. W. Melton, Alum; Alternate, Dr. Charles Prickett, Traskwood.

The next regular meeting will be held on the first Monday in April.

JEFFERSON COUNTY.—At a regular meeting of the Jefferson County Medical Society, held at Pine Bluff, March 3rd, the following officers were elected:

President, Dr. Wm. Crutcher, Pine Bluff; Vice-President, Dr. Wm. Breathwit, Pine Bluff; Secretary, Dr. C. A. Glover, Pine Bluff; Delegate to State Society, Dr. A. C. Jordan, Pine Bluff; Alternate, Dr. W. S. Stewart, Pine Bluff; Censors: Dr. G. M. Duckworth, Dr. O. G. Blackwell, Dr. J. W. Scales.

JOHNSON COUNTY.—The regular monthly session of the Johnson County Medical Society was held at Clarksville on the 3rd of March, the following members present and participating in the program: Dr. W. R. Hunt, President; Dr. M. E. Burgess, Vice-President; Dr. L. A. Cook, Secretary; Dr. J. S. Kolb; Dr. C. S. Allen; Dr. S. M. Graves; Dr. E. C. Hunt and Dr. W. F. Smith.

Dr. C. S. Allen read an interesting paper on "Meningitis." Dr. E. C. Hunt reported a clinical case. Dr. M. E. Burgess will read a paper at the April meeting on "Measles." Officers for 1908 will be elected at the next regular meeting in April.

MONTGOMERY COUNTY.—We members of a great profession find it to our mutual interest and undeniable advantage to form ourselves into societies. The coming together and getting acquainted, the reading of papers, the orally related cases, the presentation of specimens—these are constant and continual helps; and the discussions that follow, no matter how far apart the views may be, all help to keep awake and develop in us the more advanced ideas in the practice of a profession in which we are bound to use our best efforts to protect and care for that most sacred and holy temple in the universe, the body of man.—President H. M. Hicks, address before the Medical Society of the County of Montgomery.

Change of Address

Dr. W. M. Gibson from Emerson, Ark., to Nashville, Ark.

Dr. A. D. Knott, from Gravette to Wilmot, Ark.

Dr. Jno. L. Kelly from Stamps to Hope, Ark.

Dr. E. M. Black from Yancey, Ark., to Pecos, Texas.

Births

Born to Dr. and Mrs. Henry Haskell Rightor, of Helena, March 10th, 1908, a daughter, Irene Pillow Rightor.

Born to Dr. and Mrs. C. B. Shinault, of Little Rock, February, 1908, a daughter.

Deaths

NOTABLE DEATHS.

The death of Dr. J. Frederick A. von Esmarch, the eminent German surgeon, pains the medical profession generally, and is a loss that will be distinctly felt all over the world. Dr. Esmarch was a notable man on account of his writings and particularly so, on account of the Esmarch bandage. He was an uncle by marriage to the Emperor of Germany. After a long life of usefulness and medical brilliancy, he passed away at Kiel, Feb. 23, at the ripe old age of 85.

Dr. Richard Douglas. Professor at Vanderbilt University, Gynecologist and well-known practitioner of the South, died at his home February 19, at the age of 47. He has been a sufferer from nephritis from which he died.

DEATH OF DR. SAMUEL G. CARRIGAN.

It will be a sad item of information to the members of the Arkansas Medical Society to learn of the untimely death of Dr. Samuel G. Carrigan, which occurred at his home at Hope, on the 28th of February, 1908, from complications following La Grippe. He was ill only a few days, and at no time was his condition considered serious by his physicians.

Dr. Carrigan was born in Arkansas in 1856, and after obtaining his education in the pub-

lic schools of this State, attended lectures at the Missouri Medical College from which institution he was graduated in 1899. He subsequently located at Hope and was in general and continuous practice up to the time of his death.

In 1905, the Arkansas Medical Society, an organization to which he had belonged so long and loved so well, conferred upon him the honor of electing him President, and the administration of the duties of the office during his term, was marked by exceptional dignity, gracious rulings and rare exceptional ability. He was a member of the Hempstead County Medical Society and the American Medical Association. His life has been a blessing to his people, and an honor to his profession.

Evander C. Ellis, M. D., a member of the Garland County-Hot Springs Medical Society, and the Arkansas Medical Society, died at Hot Springs, March 4, 1908, from pericarditis complicating influenza.

Dr. Ellis was born in Green County, Alabama, August 17, 1841; moved to Arkansas in 1878 and located in Lonoke county, where he practiced his profession until he moved to Hot Springs in 1884, at which place he has been in continuous practice.

The following resolutions adopted by his county society attest to the esteem in which he was held by his fellow-practitioners:

"Whereas, The Great Ruler of the Universe, has, in His infinite wisdom, decreed the removal from our midst and from a sphere of activity and usefulness in the medical profession, our worthy and beloved brother member, E. C. Ellis, and,

"Whereas, The intimate fraternal relations held by him during his professional career and up to the time of his death with the Garland County-Hot Springs Medical Society as a member thereof, makes it fitting that we record our sorrow and deep sense of loss we sustained in the demise of one who, commanding the admiration of his fellow-men, had endeared himself to his brother members by uniform kindness of heart and never-failing courtesy, both in his professional and personal relations; Therefore, Be it

"Resolved, That in his death the Garland County-Hot Springs Medical Society has been deprived of a gifted and beloved brother; be it

"Resolved, That the State in which he resided has lost a worthy citizen and courteous gentleman, and the medical profession, a noble, charitable and talented member; be it further

"Resolved, That these resolutions be inscribed on the minutes of the society and published in the public press, and that copies, duly attested, be forwarded to his bereaved wife and family as evidence of our heartfelt sympathy in their irreparable loss.

"M. S. THOMPSON, M. D.

JNO. S. WOOD, M. D."

Committee.

News Items

Dr. W. C. Dunaway has removed his residence from 16th and Schiller to northwest corner 9th and Center.

Dr. J. R. Wayne is situated in the Mahoney building, Markham and Cross streets.

Dr. Corney has fitted up an office in the Martin building, corner Fourth and Main.

Dr. J. E. T. Holliman has recently united with the Pulaski County Medical Society.

Dr. Lyman B. Raschbaum has opened an office for the practice of his specialty, diseases of the eye, ear, nose and throat. Room 321 Southern Trust Building.

Dr. J. M. Colburn, formerly of Little Rock, but now of Los Angeles, California, for several years chief surgeon of the Sante Fe Railway, has resigned. The older members of the medical profession will remember Dr. Colburn, while residing in this city.

Dr. J. M. Pirtle, resident of Little Rock 23 or 24 years ago, now residing in Los Angeles, California, has recently undergone two severe surgical operations, one for some abdominal growth, and another for a mastoiditis. Although in his 75th year he is rapidly recovering from the effects.

Dr. E. D. Jones, formerly of Russellville, is now a partner with Dr. Kistler, 3146 Vermont avenue, Los Angeles, California.

DR. SCALES CELEBRATES.

Dr. J. W. Scales, of Pine Bluff, the youthful treasurer of the Arkansas Medical Society, celebrated his tenth birthday on the twenty-ninth of February in a manner befitting his age and temperament. At his home a birthday party was given, and many of his young companions enjoyed his hospitality. The day was spent in innocent, boyish amusements, and excepting a few scraps engaged in by the more pugnacious of the boys, there was nothing to mar the pleasure of the occasion. Many valuable and highly appreciated presents were received by the Doctor, but those which appealed most to his juvenile heart, were a red top, a tin horse and wagon that would really run, a box of candy, a red necktie, some glass marbles, a Teddy-bear, a real automobile and a bunch of Chinese firecrackers. Of course a birthday party would not be complete without a dinner, and the turkey, dressings, pies, jams and ice cream and cake disappeared like magic before the sharpened appetites of the kids. Dinner over, roly-holy, fox-in-the-hollow, leap-frog and mumble-peg were played until nightfall warned the little fellows that home was the best place for them; and in less time than it takes an Arab to fold his tent, they were safely ensconced in their trundle-beds, dreaming of the days when they would be great eye, ear, nose and throat specialists and make more money than they could ever spend in a life-time.

At the coming meeting of the State Society an effort will be made to have Dr. Scales emancipated, his extraordinary precocity justifying his friends in this legal movement.

"Heaven give you many, many merry days!"

The Thirty-Second annual meeting of the Arkansas Medical Society will be held in the Auditorium (Skating Rink), Little Rock, on May 13, 14 and 15. The House of Delegates will convene for the transaction of business on May 12, one day in advance of the General Session. Hotel Marion will be the official headquarters during the meeting. Five hundred members are expected.

For further information address the Secretary.

CONSTITUTION AND BY-LAWS OF THE
ARKANSAS MEDICAL SOCIETY
ADOPTED MAY, 1907.

ARTICLE I.—NAME OF THE SOCIETY.

The name and title of this organization shall be the Arkansas State Medical Society.

ARTICLE II.—PURPOSES OF THE SOCIETY.

The purposes of this Society shall be to federate and bring into one compact organization the entire medical profession of the State of Arkansas and to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life.

ARTICLE III.—COMPONENT SOCIETIES.

Component Societies shall consist of those county medical societies which hold charters from this Society.

ARTICLE IV.—COMPOSITION OF THE SOCIETY.

SECTION 1. This Society shall consist of Members, Delegates and Guests.

SEC. 2. MEMBERS. The Members of this Society shall be the members of the component county medical societies.

SEC. 3. DELEGATES. Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Society.

SEC. 4. GUESTS. Any distinguished physician not a resident of this State, who is a member of his own State Society, may become a guest during any Annual Session on invitation of the officers of this Society, and shall be

accorded the privileges of participating in all of the scientific work for that Session.

ARTICLE V.—HOUSE OF DELEGATES.

The House of Delegates shall be the legislative body of the Society, and shall consist of: (1) Delegates elected by the component county societies; (2) the Councilors; and (3) *ex-officio*, the President and Secretary of this Society.

ARTICLE VI.—COUNCIL.

The Council shall consist of the Councilors, and the President and Secretary, *ex-officio*. Besides its duties mentioned in the By-Laws, it shall constitute the Finance Committee of the House of Delegates. Six councilors shall constitute a quorum.

ARTICLE VII.—SECTIONS AND DISTRICT SOCIETIES.

The House of Delegates may provide for a division of the scientific work of the Society into appropriate Sections, and for the organization of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE VIII.—SESSIONS AND MEETINGS.

SECTION 1. The Society shall hold an Annual Session, during which there shall be held daily General Meetings, which shall be open to all registered members and guests.

SEC. 2. The time and place for holding each Annual Session shall be fixed by the House of Delegates.

ARTICLE IX.—OFFICERS.

SECTION 1. The officers of this Society shall be a President, three Vice-Presidents, a Secretary, a Treasurer and ten Councilors.

SEC. 2. The officers, except the Councilors, shall be elected annually. The terms of the Councilors shall be for two years, those first elected serving one and two years, as may be arranged, so that after the first year five Councilors shall be elected annually to serve two years. All these officers shall serve until their successors are elected and installed.

ARTICLE X.—RECIPROCITY OF MEMBERSHIP WITH OTHER STATE SOCIETIES.

In order to broaden professional fellowship this Society is ready to arrange with other State Medical Societies for an interchange of certificates of membership, so that members moving from one state to another may avoid the formality of re-election.

ARTICLE XI.—FUNDS AND EXPENSES.

Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall be fixed by the House of Delegates, but shall not exceed the sum of \$2.00 per capita per annum, except on a four-fifths vote of the Delegates present. Funds may also be raised by voluntary contributions, from the Society's publications and in any other manner approved by the House of Delegates. Funds may be appropriated by the House of Delegates to defray the expenses of the Society, for publications, and for such other purposes as will promote the welfare of the profession. All resolutions appropriating funds must be referred to the Finance Committee before action is taken thereon.

ARTICLE XII.—REFERENDUM.

SECTION 1. A General Meeting of the Society may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates, and when so ordered the House of Delegates shall submit such question to the members of the Society, who may vote by mail or in person, and, if the members voting shall comprise a majority of all the members of the Society, a majority of such vote shall determine the question and be binding on the House of Delegates.

SEC. 2. The House of Delegates may, by a two-thirds vote of its own members, submit any question before it to a general referendum, as provided in the preceding section, and the result shall be binding on the House of Delegates.

ARTICLE XIII.—THE SEAL.

The Society shall have a common Seal, with

power to break, change or renew the same at pleasure.

ARTICLE XIV.—AMENDMENTS.

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the Delegates present at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published twice during the year in the bulletin or journal of this Society, or sent officially to each component society at least two months before the meeting at which final action is to be taken.

BY-LAWS.

CHAPTER I.—MEMBERSHIP.

SECTION 1. The name of a physician on the properly certified roster of members of a component society, which has paid its annual assessment, shall be *prima facie* evidence of membership in this Society.

SEC. 2. Any person who is under sentence of suspension or expulsion from a component society, or whose name has been dropped from its roll of members, shall not be entitled to any of the rights or benefits of this Society, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

SEC. 3. Each member in attendance at the Annual Session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of his society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an Annual Session until he has complied with the provisions of this section.

CHAPTER II.—ANNUAL AND SPECIAL SESSIONS OF THE SOCIETY.

SECTION 1. The Society shall hold an Annual Session at such time and place as has been fixed at the preceding Annual Session by the House of Delegates.

SEC. 2. Special meetings of either the Society or of the House of Delegates shall be called by the President on petition of twenty delegates or fifty members.

CHAPTER III.—GENERAL MEETINGS.

SECTION 1. All registered members may attend and participate in the proceedings and discussions of the General Meetings and of the Sections. The General Meetings shall be presided over by the President or by one of the Vice-Presidents, and before them shall be heard the address of the President and the orations, and such scientific papers and discussions as may be arranged for in the program.

SEC. 2. The General Meeting may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and public.

CHAPTER IV.—HOUSE OF DELEGATES.

SECTION 1. The House of Delegates shall meet on the day before that fixed as the first day of the Annual Session. It may adjourn from time to time as may be necessary to complete its business, provided, that its hours shall conflict as little as possible with the General Meetings. The order of business shall be arranged as a separate section of the program.

SEC. 2. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every 25 members, and one for each major fraction thereof, but each component society which has made its annual report and paid its assessment as provided for in this Constitution and By-Laws shall be entitled to one delegate.

SEC. 3. A majority of the Delegates registered shall constitute a quorum.

SEC. 4. It shall, through its officers, Council and otherwise, give diligent attention to and foster the scientific work and spirit of the Society, and shall constantly study and strive to make each Annual Session a stepping-stone to future ones of higher interest.

SEC. 5. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein

it is dependent on the profession, and shall use its influence to secure and enforce all proper medical and public-health legislation, and to diffuse popular information in relation thereto.

SEC. 6. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality, and shall continue these efforts until every physician in every county of the State who is reputable and eligible has been brought under medical society influence.

SEC. 7. It shall encourage post-graduate and research work, as well as home study, and shall endeavor to have the results utilized and intelligently discussed in the county societies.

SEC. 8. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

SEC. 9. It shall divide the State into Councilor Districts, specifying what counties each district shall include, and, when the best interest of the Society and profession will be promoted thereby, organize in each a district medical society, and all members of component county societies shall be members in such district societies.

SEC. 10. It shall have authority to appoint committees for special purposes from among members of the Society who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and may be present and participate in the debate on their reports.

SEC. 11. It shall approve all memorials and resolutions issued in the name of the Society before they shall become effective.

CHAPTER V.—ELECTION OF OFFICERS.

SECTION 1. The House of Delegates on the first day of the Annual Session shall select a Committee on Nominations, consisting of ten

delegates, no two of whom shall be from the same Councilor District. It shall be the duty of this committee to consult with the members of the Society and to hold one or more meetings at which the best interests of the Society and of the profession of the State for the ensuing year shall be carefully considered. The committee shall report the result of its deliberations to the House of Delegates in the shape of a ticket containing the names of three members for the office of President and of one member for each of the other offices to be filled at that Annual Session. No two candidates for President shall be named from the same county.

SEC. 2. All elections shall be by ballot, except where there is only one candidate when election may be made by acclamation, and a majority of the votes cast shall be necessary to elect.

SEC. 3. The report of the Nominating Committee shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the General Session.

SEC. 4. The election of officers shall be the second order of business of the House of Delegates on the morning of the last day of the General Session.

SEC. 5. Any person known to have solicited votes for or sought any office within the gift of this Society shall be ineligible for any office for two years.

SEC. 6. Delegates shall not be eligible for election to any of the offices named in the Constitution, except that of Councilor.

CHAPTER VI.—DUTIES OF OFFICERS.

SECTION 1. The President shall preside at all meetings of the Society and of the House of Delegates; shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office, and, as far as practicable, shall visit, by appointment, the various sections of the State and assist the Councilors in building up the county societies, and in mak-

ing their work more practical and useful.

SEC. 2. The Vice-Presidents shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the Council shall select one of the Vice-Presidents to succeed him.

SEC. 3. The Treasurer shall give bond in the sum of \$1,000. He shall demand and receive all funds due the Society, together with bequests and donations. He shall pay money out of the Treasury only on a written order of the President, countersigned by the Secretary; he shall subject his accounts to such examination as the House of Delegates may order, and he shall annually render an account of his doings and of the state of the funds in his hands.

SEC. 4. The Secretary shall attend the General Meetings of the Society and the meetings of the House of Delegates, and shall keep minutes of their respective proceedings in separate record books. He shall be *ex-officio* Secretary of the Council. He shall be custodian of all record books and papers belonging to the Society, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Society which come into his hands. He shall provide for the registration of the members and delegates at the Annual Session. He shall, with the co-operation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the State by counties, noting on each his status in relation to his county society, and, on request, shall transmit a copy of this list to the American Medical Association. He shall aid the Councilors in the organization and improvement of the county societies and in the extension of the power and usefulness of this Society. He shall conduct the official correspondence, notifying members of meetings, officers of their election and committees of their appointment and duties. He shall employ such assistants as may be ordered by the House of Delegates and shall make an annual report to the House of Delegates. He shall supply all component societies with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its

assessment, collect the same and turn it over to the Treasurer, taking his receipt therefor. Acting with the Committee on Scientific Work, he shall prepare and issue all programs. The amount of his salary shall be fixed by the House of Delegates.

CHAPTER VII.—COUNCIL.

SECTION 1. The Council shall meet on the day preceding the Annual Session and daily during the Sessions and at such other times as necessity may require, subject to the call of the chairman or on a petition of three Councilors. It shall meet on the last day of the Annual Session of the Society to organize and outline work for the ensuing year. It shall elect a Chairman and a Clerk, who, in the absence of the Secretary of the Society, shall keep a record of its proceedings. It shall, through its Chairman, make an annual written report to the House of Delegates.

SEC. 2. Each Councilor shall be organizer, peacemaker and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual written report of his work, and of the condition of the profession of each county in his district at the annual session of the House of Delegates. The necessary traveling expenses incurred by such Councilor in the line of the duties herein imposed may be allowed on a proper itemized statement, but this shall not be construed to include his expense in attending the Annual Session of the Society.

SEC. 3. The Council shall be the Board of Censors of the Society. It shall consider all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Society. All questions of an ethical nature brought before the House of Delegates or the General Meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or component societies, on which an

appeal is taken from the decision of an individual Councilor, and its decision in all such matters shall be final.

SEC. 4. In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies, to be suitably designated so as to distinguish them from district societies, and these societies, when organized and chartered, shall be entitled to all rights and privileges provided for component societies until such counties shall be organized separately.

SEC. 5. The Council shall provide for and superintend the publication and distribution of all proceedings, transactions and memoirs of the Society, and shall have authority to appoint an editor and such assistants as it deems necessary. All money received by the Council and its agents, resulting from the discharge of the duties assigned to them, must be paid to the Treasurer of the Society. It shall annually audit the accounts of the Treasurer and Secretary and other agents of this Society and present a statement of the same in its annual report to the House of Delegates, which report shall also specify the character and cost of all the publications of the Society during the year, and the amount of all other property belonging to the Society under its control, with such suggestions as it may deem necessary. In the event of a vacancy in the office of the Secretary or of the Treasurer, the Council shall fill the vacancy until the next annual election.

CHAPTER VIII.—COMMITTEES.

SECTION 1. The standing committees shall be as follows:

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Arrangement.

Such committees shall be appointed by the President unless otherwise provided.

SEC. 2. The Committee on Scientific Work shall consist of three members, of which the Secretary shall be one, and shall determine the character and scope of the scientific proceedings of the Society for each session, subject to the instructions of the House of Delegates. Thirty

days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers, and discussions shall be presented.

SEC. 3. The Committee on Public Policy and Legislation shall consist of three members and the President and Secretary. Under the direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of public health and of scientific medicine. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and shall strive to organize professional influence so as to promote the general good of the community in local, state and national affairs and elections.

SEC. 4. The Committee of Arrangements shall be appointed by the component society of the county in which the Annual Session is to be held. It shall provide suitable accommodations for the meeting-places of the Society and of the House of Delegates, and of their respective committees, and shall have general charge of all the arrangements. Its chairman shall report an outline of the arrangements to the Secretary for publication in the program, and shall make additional announcements during the session as occasion may require.

CHAPTER IX.—COUNTY SOCIETIES.

SECTION 1. All county societies now in affiliation with this Society or those which may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Society.

SEC. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charters shall be issued thereto.

SEC. 3. Charters shall be issued only on approval of the Council and shall be signed by the President and Secretary of this Society. Upon the recommendation of the Council the House of Delegates may revoke the charter of

any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

SEC. 4. Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the Councilor for the District if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

SEC. 5. Each county society shall judge of the qualification of its own members, but, as such societies are the only portals to this Society and to the American Medical Association, every reputable and legally registered physician who is a graduate of a reputable medical college and who does not practice or claim to practice, nor lend his support to any exclusive system of medicine, shall be eligible to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every such physician in the county to become a member.

SEC. 6. Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, and its decision shall be final.

SEC. 7. In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a Board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

SEC. 8. When a member in good standing in a component society moves to another county in this State his name, on request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves.

SEC. 9. A physician living near a county line may hold his membership in that county most convenient for him to attend, on permission of the component society in whose jurisdiction he resides.

SEC. 10. Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

SEC. 11. At some meeting in advance of the Annual Session of this Society, each county society shall elect a delegate or delegates to represent it in the House of Delegates of this Society, in the proportion of one delegate to each twenty-five members, and one for each major fraction thereof, and the Secretary of the Society shall send a list of such delegates to the Secretary of this Society at least ten days before the Annual Session.

SEC. 12. The Secretary of each component society shall keep a roster of its members, and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. In keeping such roster the Secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall endeavor to account for every physician who has lived in the county during the year.

SEC. 13. The Secretary of each component society shall forward its assessment, together with its roster of officers and members, list of delegates, and list of non-affiliated physicians of the county, to the Secretary of this Society each year thirty days before the Annual Session.

SEC. 14. Any county society which fails to pay its assessment, or make the report required, on or ten days before shall be held as suspended and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Society or of the House of Delegates until such requirements have been met.

CHAPTER X.—MISCELLANEOUS.

SECTION 1. No address or paper before the Society, except those of the President and orators, shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes, nor more than once on any subject, except by unanimous consent.

SEC. 2. All papers read before the Society or any of the Sections shall become its property. Each paper shall be deposited with the Secretary when read.

SEC. 3. The deliberations of this Society shall be governed by parliamentary usage as contained in Robert's Rules of Order, when not in conflict with this Constitution and By-Laws.

SEC. 4. The Principles of Medical Ethics promulgated by the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

CHAPTER XI.—AMENDMENTS.

The House of Delegates may amend any article of the By-Laws by a two-thirds vote of the Delegates present at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published twice during the year in the bulletin or journal of this Society, or sent officially to each component society at least two months before the meeting at which final action is to be taken.

H. C. DUNAVANT,

J. S. CORN,

F. B. YOUNG,

C. H. TROTTER,

WM. BREATHWIT,

Committee.

Remember the date, the time, and the place. Annual Meeting of the Arkansas Medical Society, May 13, 14, 15, Auditorium (Skating Rink), West Markham Street, Little Rock. House of Delegates meets on Tuesday, the 12th.

PROPOSED AMENDMENTS TO THE BY-LAWS OF THE ARKANSAS MEDICAL SOCIETY.

At the last annual session the following amendments were introduced, and under the law, will come up for adoption at the coming session, to be held May 12-15.

To Amend Chap. IX., Sec. V. of the By-Laws.

Jelk's Amendment.

Resolved, That all undergraduates who are now recognized as legal practitioners of medicine in the State of Arkansas, are eligible to membership in this Society. That after the meeting of this Society in 1908, every candidate for membership in a county society shall be required to present evidences of graduation from a reputable medical college requiring a four-years' graded course.

Young's Amendment.

Nongraduates who possess all the other qualifications of membership may be admitted to associate membership in county societies. Such members shall not be entitled to vote or hold office nor to become members of the State Society, but shall be entitled to all the other rights and privileges of membership in county societies.

Resolution to Expunge Chap. V., Sec. VI of By-Laws.

"Whereas, Some of the members of the Arkansas Medical Society believe that an injustice may be done both to this Society and to certain individual members of this Society by Chapter V, Section VI of the By-Laws, and,

"Whereas, We believe that too many restrictions on the free action of this Society are wrong; therefore, be it

"Resolved, That Chapter V, Section VI, be expunged from the By-Laws of this Society."

The House of Delegates and Council Will Meet May 12, 1908.



THE JOURNAL

OF THE

Arkansas Medical Society.

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. IV.

LITTLE ROCK ARKANSAS, APRIL 15, 1908.

NO. 11

Original Articles

RELATIONS BETWEEN PHYSICIANS AND DENTISTS.*

By P. A. Skeen, D. D. S., Texarkana, President
Arkansas State Dental Association.

Mr. President, officers and members of Northeast Texas Medical Association, ladies and gentlemen:

I am proud of the opportunity of responding to this vastly important theme, the relationship that should exist between the dentist and the physician. In this connection I wish to direct my remarks to the ethical members of the two professions only, as they are the ones the laity must look to for relief, and they only. We will not dilate upon the ethics of the two professions at this time, as this is hardly embraced in our subject. Notwithstanding its importance since men cannot live unto themselves, though you might think some suppose they can, this verifies the idea that in union there is strength. In an aggregation of mental powers we may expect greater achievements than by individual effort.

I would not be expected to handle this subject from a scientific standpoint for it is intended to treat of fraternity and mutual aid, rather than scientifically.

No reason exists why the dentist and physician should not be on the most fraternal terms, even from a selfish view point, for I am sure the dentist does not desire in the least to compete with the physician in the practice of medicine.

And since the days of back woods' physicians

pulling off crowns of molars, that the competent dentists could have restored to usefulness, and since the days of competent dentists, and anesthetics, and since extracting is one of the smallest features in our profession and only resorted to as a last resort, the laity have just cause to call us blessed.

The up-to-date physician (except in extreme cases) has removed one and the only obstacle between the two professions that had any conflicting tendency, that of extracting teeth.

When we as members of the healing art stand out for the betterment of mankind physically, nothing but co-operation can crown our efforts with success. It is useless to mention the conditions physicians often find in the oral cavities of their patients, conditions they cannot correct. So it is in dental practice. We often find that our patients need the services of a physician more than they need a dentist, or that they need the services of a physician to make some corrections, so that we can get at him (the masticatory organs).

History shows as time progresses that, the mind of man is more and more enlightened and enlarged thus bringing about a more liberal and fraternal spirit, doing away with many selfish, and I might say, superstitious ideas.

The day of specialization is at hand. It brings no conflict between the two professions and bespeaks for each greater possibilities, and accelerates greater achievements. Oral sanitation is an important factor in the success of the physician. The environs make the dentist and physician, but we must help the environments. One of these is co-operation. We are creators of circumstance, but we must aid the circumstances. No hap-hazard in these professions. We should be honest, true, and faith-

*Read before the Northeast Texas Medical Association at Texarkana, April, 1908.

ful to our every trust, and to each other, then the public will be likewise to us. The ideal ambition to be achieved by our professions is broad-mindedness, progressive liberality, ethical honesty, common courtesy and strict truthfulness toward each other. The world will then feel that it is better by our being.

It has well been said: "It may be well to turn from our studies of technical and theoretical pursuits, to lay aside personal ambition and individual desires, and consider the advantages that might be gained by promoting a greater spirit of union in professional life."

If we look back through history it is very easy to see a striking tendency towards unification in the record of nations. They have come together even physically. The oceans that once separated them separate them no longer. Steam has bridged them, and the cables that run under them have made the earth so small that we may stand in New York and talk to our friends in Liverpool. Piracy and privateering have gradually disappeared. War is no longer the enemy to commerce that it once was, and we are coming to interchange our products with one another, nation with nation, with the same freedom that cities interchange with cities.

The union in political ideals has been yet more striking. All Europe west of the Russian Empire is governed by representative assemblies, speaking or purporting to speak, for the people. Time was when the political interests of individual nations urged the fighting of battles and shedding of blood. In our own time the political interest of the civilized world was represented in the late Peace Conference of the Hague.

It has not been many years since the Romanist and Protestant were putting their swords into each other's hearts, but the old antagonisms have been mitigated, the old differences have fallen into oblivion, and the great religious powers of the world all tend to unity.

All of these forces are signs of the truth that the world is growing together. In this great stream that flows towards a universal brotherhood we should blush to acknowledge

the petty jealousies that sometimes sully the crystal waters of a professional career.

There will always be rivalry in every field of achievement, and it is unjust to suppose that this element of jealousy enters only into professional life. The fact the world smiles knowingly and points the finger of scorn upon what it is pleased to term "professional jealousy," is largely due to the fact that it expects the professional world to rise above the littleness and small contentions that form an essential part in the life of the tradesman.

Success has very often been the one unpardonable crime in the world of letters. Instead of fostering a spirit of hearty approval for the man who out-runs us in the race, there seems to have been an inherent something in human nature that makes us turn from him. A good man, and a popular one, is too often the man who doesn't get in anybody's way.

"If you respect your profession as you ought, you will respect all honorable practitioners in your calling," said Dr. Oliver Wendell Holmes, when addressing the medical graduates of Harvard: "And respecting them and yourselves," he continued, "you will beware of all degrading jealousies, and despise every unfair act which may promise to raise you at the expense of a rival! How hard it is not to under-value those who are hotly competing with us for the prizes of life. In every great crisis our instincts are apt suddenly to rise upon us. But for the condemnation of this sin I turn you over to the tenth commandment, which, in its last general clause, unquestionably contains this special rule for physicians and dentists—"Thou shalt not covet thy neighbors' patients."

The promotion of professional unity and harmony should be a clearly and distinctly defined ideal in the heart of every conscientious practitioner.

It is well for us to meet together to consider the technical, theoretical and practical ideas of our professions, but it is infinitely better for us to draw closer together in professional sympathy and union. Whatever has a tendency to bring us together in a common interest and makes us forget the smaller differences that separate us in every-day life, is of untold bene-

fit. Whatever strengthens our love of professional harmony, makes it more difficult for us to be at variance among ourselves.

The greatest medium for overcoming any deficiency, whether moral, intellectual, or professional, is the medium of brains.

In this connection it may be pertinent to say that, as dentists and physicians, we are not wholly destitute of this article.

With intelligent determination we can rise above any obstacle, attain any degree of perfection, and we can have no greater need, no loftier motive, than that of promoting a closer union in professional life.

The professional world is the greatest element in modern civilization. Its representatives are men of enlightenment, who touch humanity through the press, the pulpit, the bar, and through those untiring disciples whose mission is to minister to physical pain. Their lives and their sympathetic relation with each other should be a beacon and not a false light to the world. We should rise above all littleness and jealousy, cultivate a deeper spirit of human love, and send the beams of charity into the darker places that know not the culture, refinement and intelligence that greater opportunity has given our professions.

As men of honored callings, we should help bear the burdens of our brother, rise above all littleness, and stand

"For the truth that lacks assistance

For the wrong that needs resistance,

For the future in the distance,

And the good that we can do."

We should have no room in our lives for professional jealousies, but should unite our efforts in promoting professional union, and take every advantage of our boundless opportunity to do good.

RELATIONSHIP EXISTING BETWEEN PHYSICIANS AND NURSES.

By T. F. Kittrell, M. D., Texarkana.

The trained nurse has come to stay, and we are glad of it. She is essentially a modern institution, and being a woman, she is proud of the fact that she is modern, up-to-date, or to put it plainly, young.

I think the first modern training school for

nurses was established at Bellevue Hospital in 1872, but it is for only the last few years that their services have been appreciated in the smaller towns and cities. I shall never forget one of the first experiences I had with trained nurses. It may serve to show the discipline of nurses in training. It was in 1894. I had just entered the hospital and was in charge of the out-patients. We had only seen nurses from a distance as students, except when we were called down by the professors to examine a case in the clinic, so naturally we stood in great awe of their superior knowledge and skill. On this particular afternoon when all the resident staff but myself had gone up town, a great commotion arose in the lobby and I went out to locate the trouble. There were a half-dozen negroes, one of them a dusky maiden, bespattered with blood from head to foot, and a rival or her beau had tried to subdue her by the razor-route, and in so doing had increased the size of her mouth, already large, by an extra inch or more. At least it seemed to me that it extended from ear to ear. To be frank, we were nervous and fully aware of the fact, and to keep those nurses from coming in and seeing our nervousness, was to me the most important part of that operation.

We took the patient to the operating room quietly and closed the door, but the first stitch made our presence known to all that end of town, and in filed those nurses, great numbers of them, headed by a senior, whose ancestors must have come from Ireland, for she always saw the ridiculous if it was to be seen. But they fell into their respective places and did everything that was to be done in the most serious and solemn manner, never showing by word or look that they noticed our inexperience or nervousness. From that good day to this, I have always had a very kind feeling for the trained nurse.

Without trained nurses we could do almost nothing in modern major surgery. They are the right hand of the surgeon, both in hospital and private practice. They prepare the room, the patient, the table, instruments and operator, and then, if need be, take the place of an assistant. Those of us who have seen the first assistant of W. J. Mayo, a trained, conscientious Catholic sister than whom no better assistant is in existence; or the two operating-room nurses at Roosevelt hospital in the clinic once held by McBurney; or the operating-room nurses at St. Thomas Hospital, in London, can not fail to admire their dexterity and thorough knowledge of the details of the operations. They have never ceased to be a source of wonder to me, they never seemed to make mistakes. An instrument or ligature was placed in the hand of the operator or assistant as the case might be, without his ask-

ing for it. Senn once said that he'd rather operate in a kitchen with a good nurse than in a modern operating room without one. Of course no operating room would be modern without the nurse.

The relationship existing between physician and nurse is very similar to that existing between the commander of an army and his field officers. He plans his campaign against disease, and giving his orders to the nurses who constitute the officers and men on the firing line, he expects them to be carried out, and if an emergency arises and he cannot be reached, he expects them to know what to do, and they rarely fail to meet the emergency. There was a time in the evolution of the nurse, when she would sometimes forget that she was carrying out the orders of the physician, and would take unto herself some of his duties, but that day has long since passed, and the modern nurse knows just as well that she does not know how to treat disease, but only to carry out the orders given her, as the physician should know that he cannot perform many of the duties of his nurses with the same skill that they do.

The doctor and nurse are co-workers in the great work of healing the sick; and in carrying out this work they should be loyal to their patients and to each other. How often our patients say to us, "Doctor, the nurse didn't do such and such a thing, or didn't do it like another nurse I had." We should always try to reassure the patient and help the nurse to regain the confidence lost, for often a sick man will complain of treatment that is all right, but which to his disease-clouded imagination is terrible; on the other hand, if the nurse does not use tact and diplomacy she may hopelessly impair the confidence of the patient in his physician. I have been told that nurses have so far forgotten themselves as to speak disparagingly to the patient of the physician while nursing his case, or perhaps to speak ill of other physicians, or may be to praise another physician. All these things should not be, and the profession at large, as well as the patients, soon become suspicious of a nurse who talks too much. The nurse who conscientiously aids us, who knows when it is right to talk and when it is right to be silent, is a jewel above price.

There is another relationship that sometimes springs up between nurses and physicians which emphasizes the high regard which we have for each other, and that is the frequency of marriages between members of the two professions. I have no statistics to offer, but I know personally of many marriages. Two friends of mine who were resident physicians in the same hospital, one with me, the other a year after, married

nurses who were in training in the same institution; and if I am not misinformed, the brilliant Howard Kelly of Baltimore, who is considered one of the most accomplished surgeons of the world, married a nurse. C. H. Mayo, who is so beloved by the medical profession, and who is so original and ingenious, and whose surgical experience is so varied that he does not confine himself to any branch of surgery, and who does a cataract operation with as much dexterity as he would do a section, also married either a nurse or the young lady assistant who was his anaesthetist for so long (she was not a physician). These are only a few instances of this kind.

The physician can and should prevent misunderstandings between nurse and patient in private practice. When she is going into a family who has never had the services of a nurse, he should explain to them what is expected of her and should insist that she get sufficient rest and exercise so that she will not break down, and so that she can give the best attention to her patient.

THE TRAINED NURSE.*

By Miss I. H. Perkins, Supt. Dale Sanatorium, Texarkana.

It is a very easy matter to sum up the qualities that go to the making of a good trained nurse, and the doctor, if he realizes his wish in a nurse, has not only an accurate assistant to carry out his instructions, but a finely trained intelligence to bring order into the material surroundings of the patient, as well as produce an atmosphere of confidence and tranquility in the general environment. She gives him her allegiance, and adds to his influence in many ways to bring about the conditions affecting the patient, and if guided by clear insight may give him the key to some almost inexplorable phenomena in the progress of the disease. She is his sentinel on duty during his absence, and allows no danger to approach without giving him warning. Her technical skill, acquired by arduous training, is at his service, but still more does she afford him support by her belief in his ability and integrity of purpose. Together they are a component force, engaged in warfare against suffering and death, and a nurse's loyalty and affection for the doctor under whom she serves, is like that of a soldier for the general whom he has followed through the dangers

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and fatigues of battle. The following tribute given by Miss Grace Holmes, a trained nurse in an Eastern State, will show the esteem in which the doctor is held by the nurse who shares his work:

THE DOCTOR AS THE NURSE KNOWS HIM.

Physician—surgeon—is he not a man

Like unto other men—with hopes as high?
Is not his heart of hearts kept pure, by God
And wife and child and home, the same as thine?

Sometimes "Our Father" deems it best to send
Sorrow and trouble into homes of men—
Does your heart falter cold and sick with fear?
Are sorrow such as these unknown to him?

No—every human heart knows its own grief
And he—this man of iron nerve, has stood
With bowed head and white and tearless face
While "dust to dust" was said about his own.

Again—I see his eager, anxious face
As in the silent watches of the night,
He stood beside a lowly cot of pain
And whispered low, "Lord show me what to do."

Those hungry, hopeless eyes looked into his;
He met the unspoken question with brave look,
And faltered not—but all the long night thro'
With ceaseless energy he labored on.

His Father heard his prayer and answered it
A precious life is saved—as by his skill.
The day-light comes—and does he pause for rest?
To sterner duties his high office calls.

And I have stood beside this surgeon there,
Where men lay down their lives in simple trust
Beneath the skillful hand of him who seeks
To stem the tide of human pain.

And I have seen him work with bated breath
To snatch—it almost seemed from God's own
hand,

The soul that had well-nigh escaped
Its earthly dwelling place to go above.

And I have seen him draw quick breath again,
Have seen the glad light leap into his eyes
As feeble, slow, unsure, reluctantly,
The tiny, priceless spark flamed up again.

And I have stood beside him there once more,
A pure and holy reverence in his face—
When he has laid her little first born child
Where God has planned its safest resting place.

And memory recalls another scene—
A soul has gone into the great beyond—
And he—as with a woman's gentle touch—
Closes the dull eyes, folds the lifeless hands.

'Tis that your eyes are dimmed with tears, if you
Have failed to read his look of sympathy.
He's gone—his silent hand clasped, seemed to say,
You need the Great Physician for this pain.

We have said that the nurse supplements the doctor. He expects from her adaptability to her surroundings, ingenuity in utilizing the means at her command, a maintenance of a high standard of work which shall produce good results, and a loyalty beyond question. What, then, is the responsibility of the doctor in bringing about these ideal relations?

The question of the nurse and her education, is not merely that of the nurse, but it is part of a great industrial problem which has caused, and is causing, much concern as to its solution; that is, what are the best employments for women whereby their economic value as wives and mothers will be least endangered?

Many of the employments open to women bread-winners are of such a character that the mental, moral and physical growth of the race is retarded, and also, the list of occupations in which the majority of women can engage with the hope of any gain for themselves beyond that of an occasional slightly increased money recompense, is limited. These occupations are for the most part mechanical and nothing else. There is no high field of thought connected with the work of the waitress, the factory hand, or the box-maker, nor do the conditions under which she works tend to her physical development. With the occupation of nursing, these objections are reduced to a minimum, not only because of its nearness to the position for which nature has designed woman, and its freedom from those inroads on the physical being which so many occupations followed by women produce, but also because a woman cannot be constantly engaged in trying to alleviate pain, without gaining a broader philosophy of life and a more tolerant view of human frailty. She must, if she loves her profession, be ever seeking better ways and means for helping to reduce the burden of both doctor and patient. Of course, this is not the case with the woman who looks upon the nurse's profession solely from the financial side, nor does a course in the finest training school change the nature of a woman

who is selfish and gross in her entire make-up. Far from it. Neither is a careless, inconsiderate, or even untruthful woman made into an earnest, truthful one by the assumption of a white dress, cap and apron. It is just here that the doctor can do much toward elevating the standard along all lines, and it is to the doctor that the nurse looks for help in educating both nurse and public.

A good deal has been said about nurses being over educated, the argument being that manual skill was sufficient; but no less a person than Dr. Henry M. Hurd, of Johns Hopkins University, has set his seal on the value of a good theoretical training for the nurse in connection with her lessons in hospital economics and technic.

Dr. Hurd says, "Handicraft concerns itself most in learning the way some other person has performed a given piece of work, and generally considers ease in doing it. Education on the other hand gives good reasons for doing the task in a special way, and teaches the principles which underlie any proper method of doing it, and which may be effective in the future, thus enabling one to meet an unexpected emergency, or cope with a new difficulty. I have no desire to minimize the importance of manual training, or be classed among those who would train the head rather than the hand, but manual training has been sufficiently emphasized in our modern educational methods and needs no elaborate advocacy at the present time. What we do need is that our doctors will unite in an effort to help give our future nurses the drill in theoretical knowledge which will render possible a proper coordination of every faculty."

We may go farther and add to what Dr. Hurd has said, that the reason for educating the nurse to a greater degree than that implied in the mechanical sense, has a wider significance than merely her function as a nurse on private duty or in the hospital ward, for she may be an exponent of the doctor's views on philanthropy or social reform, and thus help him in a larger way to conserve the public health, which is the Commonwealth's most precious possession.

Now as to educating the public. It is from

the doctor that the public obtains its ideal of what a nurse should be, therefore it behooves him to see that the fulfillment of the ideal is of the best, no counterfeits should be allowed. To this end it is necessary that there should be some mark of distinction between nurses who have spent the required time in training at a school recognized by the medical profession, and those who have diplomas from questionable schools; or worse yet, those who advertise as trained nurses, and have never been inside of a hospital or school of any kind. The public does not know. Like the man of whom the poet wrote,

"A primrose blooming on the river's brink,
A yellow primrose was to him, and nothing more."

A trained nurse to the general public means the white dress, cap and apron before mentioned, accompanied by a thermometer, a watch much in evidence, and a severe manner likely to inspire awe in the minds of the inexperienced beholder.

Efforts have been made, and are still being made, to procure legislation which will in a measure overcome the danger that necessarily follows the employment of these so-called trained nurses and self-educated nurses. This legislation requires the registration under a state board, of all nurses who successfully pass the examination given by the board. It exists in South Africa, New Zealand, Australia, and a few of our own states, but there is a large territory yet unprotected. Arkansas nor Texas have laws regulating the matter, and we would like to ask that when an effort is made in this direction that you give it your support and adherence.

We hope you will help us to raise our profession to that high plane on which it belongs, and that the day is not far distant when to be a trained nurse will mean to be a registered nurse, and that the letters "R. N.," meaning registered nurse, written after a nurse's name will be as much a certificate of proficiency and integrity as the letters "M. D." now indicate when affixed to the cognomen of the doctor.

WHEN TO OPERATE FOR GALL-STONES: REPORT OF CASES.

By W. T. McCurry, M. D., Texarkana.*

The subject is indeed a broad one, and would suggest unlimited information; however, I shall simply state a few actual experiences, which have recently been mine, and ask you the information my subject would doubtless lead you to expect from me.

I shall not touch upon the causes of this trouble, but after having reached a positive diagnosis, the next step arises, When to operate?

The three most important conditions in the surgical treatment of any disease are:

Firstly, the mortality.

Secondly, the permanence of cure.

Thirdly, the disability arising from the operation itself.

Never operate when you have jaundice and infections. I would hesitate even with jaundice alone, as the mortality is great. It is best to postpone surgical procedure, if possible, until the patient clears up and regains a more normal state. I will report two cases coming recently under my observation.

Case No. 1.—Mrs. C., white, age 24, family history negative; married four years, has one child one year of age. Had suffered from childhood with pain in the epigastric region, ranging toward the right shoulder blade; diagnosis had never been given. Seven years prior to the operation, patient had malarial hematuria; for two years thereafter her general health was fairly good, then came the most intense pain, or colic, in the epigastric region, again ranging to the right. These attacks usually were followed by jaundice, chills and temperature, each becoming more severe.

Patient came to me Dec. 13, 1907, at that time having been confined to her bed for four weeks, being badly jaundiced and having chills and irregular temperature, all indicative of infection. After three weeks treatment, the temperature subsided and the general condition was improved. At the end of this time she was operated upon.

On making an opening, I found the gall-bladder very much thickened and contracted to the size of a quail's egg. The gall-bladder contained very little bile, with the irregular flat, shell-like, semi-solid stone obstructing the cystic duct, to the extent that very little bile could pass.

The gall-bladder being so small it could not be stitched into the abdominal opening, I anchored a cigarette drainage into it with chromicized cat-gut, closing the abdomen in the usual way. There was a free drainage of bile for three weeks and

the opening closed itself, leaving patient in good condition. A recent letter from her home physician informs me she is apparently well and in good health.

Case No. 2.—Mr. G., white, age 46; total abstainer; family history negative; personal history good. Clinical history: had suffered periodical pains over the epigastric region ranging to the right, and under scapula for 12 years. Following these attacks there would be continuous nausea and vomiting from two to three days. It required one-fourth to three-fourths of a grain of morphine hypodermically to effect relief. Patient came to me December 20, 1907.

After making a diagnosis, I advised an operation to which patient would not consent. On March 21, 1908, he returned to me greatly weakened, slightly jaundiced and in poor condition for surgical treatment. He had been having continuous pains for one month, only obtaining relief when under the influence of morphine.

He was prepared, and operated on, on the 23rd day of March. On making an incision the gall-bladder was found to contain only a little bile and gall-stones, varying in size from that of a filbert to that of a mustard seed, being of irregular shape with rough surface. One of the larger stones being engaged in the cystic duct near the juncture of the hepatic duct, it was forced back into the gall-bladder and removed with the other stones.

The gall-bladder was stitched into the opening in the abdomen with chromicized cat-gut. I placed rubber drainage tube covered with iodoform gauze. The abdomen was closed in the usual way. Drainage was removed at the expiration of one week, being replaced by a loose gauze drain. Patient had very little disturbance, except jaundice developed about the fifth day, which in a few days passed away. To-day the patient is sitting up in his room, has a good appetite, and still drains some bile. I hope to send him home in a few days fully recovered.

INDICANURIA

By Nettie Klein, M. D., Texarkana.*

One of the most important subjects that confronts the medical profession is to more accurately investigate the causes of the disturbances in metabolism. I am indebted to Dr. W. H. Porter, of the New York Post Graduate, for the data obtained on indicanuria.

Indicanuria is not given the important place it should occupy in the routine urinary examinations made by the surgeon, specialist and general practitioner. In making a urinary report I lay

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as much stress on indican as I do on the findings of albumen and sugar, for there is no pathological condition that deserves more consideration; and to quote Dr. Porter, "Until the profession as a whole grasps the extreme gravity and recognizes the frequency of indicanuria and learn how to interpret correctly its true import, there can be but little progress in its successful management. Until this is accomplished there will be comparatively little progress in medicine, for it is only along the line of chemico-pathology that true advance can be made."

Prout, as early as 1840, discovered a blue coloring material in the urine, which he called indigo. Schunk, Bauman, Neicke, Breiger, Baeyer and others have demonstrated that indol is produced always and only by bacterial putrefactive decomposition of the proteid elements of certain foods during their passage through the alimentary tract. Indicanuria is only a symptom, yet it indicates that there is a disturbance in metabolism, and that somewhere in the alimentary tract certain food elements are undergoing putrefactive decomposition.

The method of demonstrating indican in the urine is very simple. Add in a test tube 10 c.c. of urine and chemically pure concentrated HCl. To this add three drops of a 0.5 solution of potassium permanganate. Then add a few drops of chloroform, then one or two more drops of the permanganate of potash solution and a few more drops of chloroform and shake well for a few seconds. There will result a varying blue color which is due to precipitation of the indican by the chloroform. The amount and intensity of the color determine the extent of the putrefactive changes. The color varies, ranging from a deep blue to a decided greenish or even black, as is seen by the chart which Dr. Porter has allowed me to use.

While I am of the belief that the indol is formed in the intestinal tract, there is a theory that the indol formed in the intestinal tract is absorbed as such from the alimentary canal, and carried by the hepatic blood stream to the hepatic glands. The hepatic theory is less favored, for in the technical formation there would be a permanent lesion in the liver cells, the same as occurs in joint structures in gout when the proteid molecule is oxidized into uric acid in the cartilage cells.

There are other by-products formed by this decomposition that have varying degrees of toxicity, that when they reach the general circulation give rise to an endless chain of symptoms in various parts of the body. There are often neuralgic symptoms, headache, vertigo, insomnia; and when there is an associated intralobular

compression jaundice, there is apt to be nausea.

1st. The conditions favoring the production of indican are: over-eating and drinking, or taking food of faulty composition.

2nd. A decrease in the amount and perfection of digestive secretion.

3rd. A faulty innervation of the glandular system as a whole.

In conclusion I would say that indican in the urine must always be regarded as a danger signal and a pathological product, and never looked upon as physiological or normal, and indicates the necessity for immediate correction to offset more serious complications.

TUBERCULOSIS OF THE KIDNEY.*

By J. M. Taylor, M. D., Fort Smith.

Renal tuberculosis may be primary or secondary, and it may be bilateral or unilateral. Primary cases are usually unilateral in the early stages; later on the infection may descend to the bladder and thence to the opposite kidney. Secondary cases are concurrent with other tubercular foci. It is with primary cases that this paper is more concerned.

The mode of infection in primary cases is not exactly clear. It may result from latent infected glands, or it may pass through the healthy tissues to the blood stream without causing any lesion at point of entrance; possibly through the stomach from infected milk, or it may be an ascending infection through the urinary canal. More frequently, however, the infection is hematogenous. The claim is made by some authors that there is no such thing as primary renal tuberculosis, but when we consider the complex structure of the kidney and its enormous blood supply, it receiving nearly fourteen times as much blood as any organ in the body, according to comparative weight, also that a principal function of the organ is to rid the economy of impurities, it does not seem strange that it should frequently be the organ first infected by tuberculosis. Prof. Ernst Kuster cites numerous cases of primary infection, in fact, in his opinion, the majority of cases are of primary origin.

It occurs more frequently in the male than in the female, in the proportion of three to one. It is more often found in persons between twenty and forty years of age, but may occur at any age of life; in fact it is not infrequent in children of ten or twelve years and has been found in an infant three months old.

In the hematogenous form the lesion is usually in the cortex encapsulated in the dense connective

*Read before the Hot Springs meeting of the Medical Association of the Southwest, November, 1907.

tive tissue, while in the ascending form the wall of the pelvis is the part more frequently affected, usually in the form of ulcers. Occasionally in the late stages the affected kidney may be enlarged; more frequently, however, it atrophies. Not infrequently a true pyonephrosis may exist.

The symptoms are, a persistent remittent hectic fever, often without any apparent cause; progressive loss of weight and strength and loss of appetite. There may or may not be pain or tenderness in the region of the kidney. The quantity of urine may be normal, yet more often the amount is slightly increased, and may contain albumen, although the albuminuria is spasmotic. The specific gravity of the urine is low, usually 1010 to 1015, but sometimes runs as low as 1004. The microscope shows few casts and little or no epithelium. Tubercular bacilli are present in the urine in all advanced cases, occasionally shreds or bundles of connective tissues are found and pus and blood frequent. There are no disturbances of the heart and arterial system, and anasarca is absent. Cystitis is the usual accompaniment or sequence, and very often hematuria is present. Hawley says that in all cases of transient hematuria of doubtful cause we should consider the possibility of renal tuberculosis.

The diagnosis should not be difficult. For this purpose the finding of the bacillus is invaluable, but the possibility of confusing smegma bacilli with tubercular bacilli should always be borne in mind. For this reason, and because tubercular bacilli may be present in such small numbers as not to be readily detected, it seems advisable to inoculate the guinea pig for confirmation of the test. However, in the early stages of the disease the bacillus tuberculosis may not appear in the urine, since the tubercular foci are situated in the cortex encapsulated by the strong connective tissue and must break down and ulcerate before the bacillus is liberated. And again, tubercular bacilli may be found in the urine and it may be impossible to decide whether they come from the kidney or the bladder, yet this mistake will seldom be made if we remember that renal pus is always acid and that of cystitis invariably alkaline, yet where a concurrent cystitis exists the acidity of the renal pus may be masked.

Since it is important that we make an early diagnosis, and as the origin of the tubercular bacilli may be in doubt, and for the further reason that the microscope is not always convenient or practicable to the busy practitioner, we should be able to make a diagnosis with a fair degree of certainty by a careful clinical examination.

Persistent hectic fever, loss of weight and strength, transient hematuria, increased amount of urine of low specific gravity, and the absence

of anasarca and of heart and arterial complications, should be sufficient to make a diagnosis to which finding of tubercular bacilli could only be a valuable confirmation.

Renal calculus and chronic non-tubercular pyelitis are perhaps more likely to confuse the diagnosis than anything else. There may or may not be pain in either case. Hematuria may be present as also may be the fever, but in renal calculus hematuria is more constant, fever is rare and tubercular cachexia is absent. The X-Ray will often clear the diagnosis. In pyelitis the fever is irregular and long periods of normal temperature intervene. Following a period of apyrexia, a high fever ushered in by a chill is dependent upon an obstruction of the ureter and consequent retention of pus. The pain in the loin is more constant and severe, and there is a more frequent desire to urinate, and the urine contains an abundance of epithelium.

Primary hematogenous renal tuberculosis may be mistaken for typhoid or malarial fever. The following case is illustrative:

The patient, a lady fifty-seven years of age, whose family history was negative, came to Fort Smith about the first of April, 1907. She said that her doctor told her that she had chronic malarial fever. From my examination I was inclined to believe that she was convalescing from a protracted case of typhoid fever. She was able to sit up some, had a variable appetite, with very poor digestion, and had a slight rise of temperature every afternoon which subsided before midnight to return the next day. She complained of no pain except a slight tenderness in the abdomen. Inquiry about the kidneys was answered by, "Oh, they are all right. I never have any trouble with my kidneys," consequently I neglected a duty we owe to our patients and ourselves in all continued fevers, that is, an examination of the urine.

Instead of the patient convalescing, as I had expected, she gradually grew weaker, the fever increased and the remissions became shorter. I finally asked for a specimen of urine, which I found contained pus and slight traces of albumen, with a specific gravity of 1008, which finally ran as low as 1004. The daily quantity was about sixty-five ounces. After a careful examination of the heart and arterial system with negative results, I made a diagnosis of renal tuberculosis, which was afterwards confirmed by the finding of tubercular bacilli in the urine. After an illness of nearly nine months, without the least anasarca or uremic symptoms, and an entire absence of cystitis, and never during the course of the disease having the slightest cough or expectoration, she died on September 13, 1907.

Having made a diagnosis of renal tuberculosis,

we should determine, if possible, whether the infection is unilateral or bilateral, and if unilateral which kidney is affected.

The fact that one kidney is found to be tender is not sufficient evidence that it is diseased. It frequently happens that, owing to the added work thrown on the healthy organ by a weak mate, it becomes enlarged and hyperaemic though perfectly healthy and capable of performing the functions of both organs; while the tubercular kidney may atrophy and be free from pain and tenderness.

Louis Heitzman claims that the presence of uric acid or the phosphates denotes one healthy kidney, as a badly diseased kidney cannot excite these substances.

Kapsammer has employed the phloridzin test two hundred times and claims for it absolute reliability. After emptying the bladder, he injects subcutaneously 0.01 gm. of sterile phloridzin and examines the urine every five minutes. If sugar appears in from ten to fifteen minutes one or both kidneys are considered sound, but if it does not appear in from thirty to forty-five minutes both organs are functionally unsound.

The cystoscope may give valuable information. The orifice of the ureter on the affected side will look pouty and may be eroded, and pus may be seen discharging from the ureter on the affected side.

Catheterization of the ureters, though sometimes in the male very difficult, gives probably the most positive information. We should, however, not overlook the possibility of infecting a healthy ureter by the use of a catheter. Hugh H. Young advises the use of Caspar's double catheter and cystoscope.

Perhaps the most convenient method of segregating the urine is what is known as Luy's method. It consists of what appears at first notice to be an ordinary metal catheter. It is in three longitudinal sections, the two outside sections having a groove on the inner side which when fitted to the middle section form two separate tubes or canals. Around the middle section is fitted a fine rubber condom having a screw attachment which, when the catheter is introduced, will put the rubber on a stretch, thus dividing the bladder into two compartments. The urine from each ureter passes out through the separate tubes. If the urine on one side is healthy and the other shows evidence of disease the test is complete, but if the urine on both sides shows evidence of disease it is uncertain whether the test is accurate or whether both kidneys are involved. In this case we must resort to the catheter.

The prognosis in all cases of tuberculosis is unfavorable. Nevertheless cases of renal tuberculosis, although bilateral, are not always fatal. Re-

covery is quite frequent where the disease occurs in children, and is not impossible in adult life.

The treatment in cases of unilateral infection is necessarily surgical. If it can be demonstrated that the patient has one healthy kidney the infected one should be speedily removed. In this connection it is well to remember that in rare cases there is congenital absence of one kidney.

L. Bolton Bangs performed one hundred and fifty-nine nephrectomies for unilateral renal tuberculosis with an immediate mortality of twenty per cent, but with complete cures in fifty per cent of the cases.

In bilateral cases and those of any kind where an operation is contra-indicated, the treatment is hygienic and dietary, as well as therapeutic. The patient must have plenty of fresh air and sunlight and very moderate exercise, with a plain nutritive diet. Raw beef, raw or very soft-boiled eggs and sweet cream and milk, are invaluable. The objection raised by some to albumen in conditions of albuminuria, does not seem tenable when we remember that pathological albumen is not excreted from the blood, but oozes from the congested or inflamed glomerular epithelium, and under no circumstances is it a cause, but a symptom of the disease.

The medical treatment should be largely supportive. Cod-liver oil and the various tonics are useful. The digestive organs must receive proper attention, and the liver and bowels should not be neglected. Urinary antiseptics are of doubtful value unless there is a mixed infection, when hexamethylenamina may be employed.

After nephrectomy the patient should have much the same treatment as the inoperative cases to guard against the reappearance of the infection elsewhere.

I justify myself in introducing this paper on a disease that is so largely surgical in the section of general medicine since it is a fact that it is to the general practitioner that these cases come for treatment, and how frequently it is true that to him the surgeon is indebted for his diagnosis.

THE IMPORTANCE OF FATS IN INFANT FEEDING.

By Dr. C. S. Merriman, Professor of Diseases of Children in the University Medical College, Kansas City, Kan.*

If an infant is to thrive and develop properly it must have all the elements of its food in proper proportions, whether it be fed from the breast, from the bottle or from the table. I wish to point out some of the ill effects of the deficiency

*Read before the Hot Springs meeting of the Medical Association of the Southwest, November, 1907.

cy of the fats, without detracting from the importance of the carbohydrates, proteids or other ingredients of the food.

I regard this important because of the great tendency to leave fats out of the food, either thoughtlessly or from lack of knowledge of its importance. Some mothers deprive their babes of the proper amount of fat by not eating a sufficient quantity of proteid matter, such as meats, eggs, etc. A vast majority of bottle-fed babies are deprived of a sufficient quantity of this element, by being fed on such foods as condensed milk, Nestles' food, malted milk and others; also by diluting cow's milk too much or by sterilization; and later when feeding from the table by being deprived of the proper amount of cream, butter, fat meats, and gravies. The first named foods are far below the standard in fats. Children who are robbed of these elements of their food are far below par in many respects. First, they are almost sure to have rickets, the bones will be small, ossification does not take place properly in any of the bones. I believe that the small amount of this element is the sole cause of this disease. I am sure of one thing, that a goodly supply of fats in the food will cure rickets. These children will also cut their teeth hard and late, their nervous systems are not properly developed, hence are more liable to spasms, croup and kindred trouble. They are very prone to have eczema, papules, pustules and similar skin diseases. I have seen many babes who have had eczema of the face, and some cases with it all over the body, and babies whose scalps were full of pustules, all because they had been fed on food with a low per cent of fat. I have seen these same babes cured by supplying this ingredient and very little other treatment. Some children will develop keratitis from the same cause. With this kind of a diet the child will become constipated and the constipation will cause still more trouble.

Let us see what part fat plays in the general body nutrition and development. By its combustion it develops heat and energy. While this is true the proteids in addition to this same function, are the great tissue builders of the body. The combustion of fat spares the albumins. Hence, when fat is supplied in the food in proper quantity, the entire energy of the proteids can be expended upon the growth and nutrition of the cells of the body. The demand made on the proteids by the rapid growth of the body makes it important that the fats aid the work of the proteids. When fats are deficient the carbohydrates cannot spare the albuminous waste. Thus it becomes necessary for the proteids to undergo combustion to maintain the body heat and energy,

thereby lessens its work in tissue building. In other words, the proteids have to do the work that should be done by the combustion of fats, thereby leaving a lessened amount of material for construction. The growing child demands a larger proportion of fats than the adult, and the bone of the growing child demands more fat than almost any other tissue. When a child, or even an adult develops eczema so many practitioners lessen the amount of fat in the food and the patient is usually a long time in recovering. I have seen many children cured of this disease by increasing the fat in the food and little or nothing else.

The same is true of rickets and many other forms of malnutrition. I do not claim that the infant cannot live with a very low percentage of fat in its food, but that it is more liable to certain diseases, and that it can never reach that stage of perfect development that it would if supplied with a liberal supply of fats.

To illustrate what I have just said I wish to briefly report three cases:

Case 1.—A babe, four and one-half months old, with a splendid family history, the mother a perfectly healthy woman was supplied with an abundance of milk which was very poor in fats, but rich in sugar. The babe, a very fat one, had eczema involving about two-thirds of the skin of the entire body. The little fellow was very restless, cried most of the time which I supposed was due to the itching. He was continually rubbing his face with his hands. An increased amount of meat was added to the mother's diet. The babe was given codliver oil three times a day and one feeding of cream. The skin was oiled to protect it from the air. Within about one month it appeared to be well, however, there was a slight return of the trouble twice during the next three months, after which time there was no more trouble.

Case 2.—A babe, four months old, whose mother never did furnish it with a sufficient supply of milk, which was poor both in quality and quantity, the fats being less than one per cent. The babe was poorly nourished. It had been having a great many small boils on the scalp for about six weeks. I opened about fifty in one week. At the age of four months it was weaned and fed on formulated milk, which agreed with it from the start. It immediately began to improve and in a very short time there were no more boils and was soon fat and well.

Case 3.—A babe, six months old, who had been fed all his life on condensed milk, developed a well-marked case of rickets. The following treatment was prescribed: Formulated milk, rich with cream, was used in place of the condensed

milk. Codliver oil three times a day and a piece of fat bacon was given the child once a day from which it would suck the fat. No medicine was prescribed. The child made a rapid recovery.

ESOPHAGO-TRACHEAL CARCINOMA.*

Report of a Case.

By J. Z. Sexton, M. D., Paragould.*

That I may the better present the most important facts in this very unique case I have written it out as I saw and understood it. From the concensus of the diagnosis I suppose it would be proper to designate it an esophago-tracheal carcinoma.

Mr. C., age 65 years, and the last ten of which were spent in this city, an old Union soldier and pensioner living in peaceful harmony with second wife, lived a sedentary life generally speaking, and since residing here had been employed as hostler and general roustabout in a livery stable most of the time. From what I have been able to gather from his son and others, he was at one time a very well-to-do, respected and worthy citizen; but some years since, moving to this city, lost his membership in Odd Fellows, began drinking and going from bad to worse, finally became so he would drink anything he could get that contained a little alcohol—peruna, the different extracts and jamaica ginger were some of his favorite beverages.

I was first called to see the patient about three months previous to his death, and gave him treatment at frequent intervals during that time. When I first saw him three months ago, I found him very much emaciated, anemic, weak and cathectic looking, but still able to come out in town, which he did once or twice daily. His principal complaint was pain, in the mediastinal region, and difficulty in swallowing; but pain was not sharp or even severe enough to require anything for it. The pain seemed to radiate to the right through the lungs along course of right bronchus. He said it pained him to swallow, and he was continually beseeching me to give him something to open his throat.

Physical examination did not reveal anything

except possibly a chronic catarrhal condition of the bronchi, the patient having had a cough with slight, thick mucoid expectoration. for a long time past, sometimes very troublesome but generally not much so. He said his throat was dry as was also his mouth; but there was from the beginning of my observation of the case the most fetid odor to the breath it was ever my lot to smell. You could detect it on entering the room. On auscultation and respiratory hythm seemed to be normal and percussion did not show any tumorous mass in region of complaint; neither was there any aneurysmal bruit. The heart sounds were especially clear and distinct, and owing to thinness of chest walls the click of the valves were very audible. Pulse was generally weak and thready, sometimes going to 90 per minute. The epigastrium did not show any abnormality. The bowels were obstinately constipated. and my treatment was principally directed to keeping the emunctorics in condition, expectorant mixtures for cough. I placed him upon a proper diet.

A little later, knowing the former habits of patient, I gave him hydrochloric acid supposing that he had a catarrhl condition of the stomach. As patient showed no improvement, but, on the other hand, grew steadily worse, and deglutition became more difficult; I came to the conclusion he was suffering from an ulcerative gastritis extending up into the esophague and of long standing; perhaps with resultant cicatrices and partial occlusion of tube. The question of malignancy was, of course, considered, as was also the probability of tubercular deposits, but no definite diagnosis could be made. There was no indication of tubercular deposits in lungs that I could ascertain. The general contour of chest on inspection was symmetrical. Nothing presented that was calculated to arouse suspicion. He had some difficulty in urinating at times, the secretion was scanty, very red, and contained also phosphates but no albumen at the time of my examination. There was never any dark stools such as we would possibly look for in hemorrhage, and never at any time did I discover any elevation in temperature; no history of traumatism. Patient seemed always calm, but

*Read before the Greene County Medical Society, March, 1908.

wore an apprehensive look on his face continually.

On Monday, about three weeks ago, I was called by Mrs. C., who spoke wiser than she knew when she told me patient coughed up everything he swallowed. On arriving, patient said that he could not swallow—that it strangled him to try it. I jokingly told him that I knew better, that he was scared, and picking up a bottle of aromatic cascara setting on the table, poured out a teaspoonful and asked him to take it. He did so, and watching him closely I saw the pharyngeal constrictors at work, and deglutition seemed to be complete, but just in a second or two he commenced to cough which was hacking in nature. When the expectoration appeared it was the cascara, all blubbery, mixed with air and mucus. He spit it out on the paper, and did not get relief until it all came up. I had him try again with milk and water, but with the same results. I then knew the esophagus was closed, but little realized the true condition, thinking the strangulation was due to ingesta regurgitating through the epiglottis into lung during the act of inspiration. Patient complained of thirst, and I, of course, immediately instituted measures of relief. First I tried the ordinary stomach-tube of soft rubber. Could get it past the constrictors, or rather he swallowed it past, then on down the esophagus for four or five inches, as I thought by measurements on the tube from mark at teeth. There it stopped and any attempt to go further was futile. Then procuring a bougie, I tried that, but without success, as I did not dare to use much force in view of the uncertain condition existing. I then gave him a high rectal injection of normal saline, and instructed Mrs. C. to give him at stated intervals rectal injections of saline and peptonized milk as he could retain them. I waited for twenty-four hours, when I tried to pass a small catheter down his throat. Failing in this we called Dr. Clegg into the case who, after reviewing all the facts and making a physical examination, gave his opinion that the tube was permanently closed, and the only measure of relief he could offer was an operation (gastrostomy), and wanted it understood that

it was only for temporary relief to alleviate the distressing conditions due to hunger and thirst, and not for a permanent cure. The operation was decided upon, room prepared and nurse secured. In the meantime we nourished him as best we could.

The operation was performed by Dr. Clegg, who, after opening the abdomen and making fast the peritoneum with silkworm-gut with pressure forceps, drew the stomach into wound, selecting a point as near the lesser curvature as possible; then a continuous suture of cat-gut was inserted into wall of stomach through the peritoneal and muscular coat but not entering the mucus lining of stomach, and made fast to parietal peritoneum all around the wound, leaving a loose section of stomach protruding from the wound as the case was one in which no time could be lost for adhesions to form before opening the stomach. The organ was at once opened, a rubber tube inserted allowing five or six inches to protrude, and the whole would close around the tube. Patient stood the operation and anesthetic surprisingly well in view of his weakened condition, and did not develop any alarming symptoms of shock. He was then given into stomach through tube two teaspoonfuls of liquid peptonoids in one-half tumbler of water to be repeated every four hours; this with an occasional hypodermic of strychn. sulph., and some injections of normal salines both in rectum and stomach, constituted the after treatment for two days, when peptonized milk every four hours was added to his bill of fare. Patient for the first three or four days presented a good pulse and temperature record, at the end of which time his pulse commenced to gradually grow weaker; temperature a little higher, but never over 101 1-2 until a few hours previous to death.

His pulse went from 104 shortly after operation to about 140 shortly before dissolution took place. He also complained at this time of very oppressive feeling about stomach and chest, and I do not think the mobility of stomach was ever sufficient to take care of even the small quantities of light nourishment put into it. The expectorations at this time also assumed the most fetid odor and in appear-

ance resembling large flakes of thick, green pus.

The operation I think, was a decided success as post mortem examination will presently show, and Dr. Clegg is to be congratulated upon the manner in which it was performed. The son asked for an autopsy, and Dr. Clegg and myself, in the presence of several professional witnesses, opened the body. The chest was opened first by throwing back or lifting up the sternum with cartilages of ribs attached, not disarticulating at sterno-clavicular articulations. The pericardium was then opened. The general appearance was normal. It was not opened for valvular inspection. No fluid in the pericardial sac; neither was there any in pleural cavity. The left lung showed considerable carbon deposits. The right lung showed the appearance of recent active congestion which must undoubtedly have contributed largely to the immediate cause of dissolution as well as account for the rise of temperature at the last. On cross section it showed quite a quantity of what appeared to be sero-purulent exudate. There was plenty of pleuritic adhesions on this side which also caused Dr. Clegg to remember a pleuritic affection he had several years previous.

The aorta was noted as being normal, and the esophagus was found, dissected out and carefully examined for the whole of its length within the immediate field of our examinations, which was from the root of lung to esophageal opening in diaphragm. It seemed to be entirely normal. It was then cut and a probe inserted in stomach end which passed into the stomach without obstruction. A finger was then inserted with same results; probe was then inserted into upper cut end and seemed to extend clear up to fauces which fact caused us to wonder considerably as to the correctness of our diagnosis that the tube was closed.

Holding the cut end in hand the tube was carefully dissected from its attachment upwards after cutting through the root of lung to clear the field. Behind the arch of the aorta and about opposite the second and third dorsal vertebrae, obstinate adhesions were encountered so that the tube could hardly be separated from the anterior surface of vertebrae without tearing. It, too,

was closely adherent to all its immediate relations, and especially so to trachea, and when more force was used to separate it from trachea it revealed a surprising state of affairs unprecedented in the experience of all present, and most entirely unthought of in connection with this case; that is, there was a fistulous opening between the esophagus and trachea extending in width about one-third the circumference of trachea and about two inches long, about opposite the second and third dorsal vertebrae.

When the dissection into fistula occurred a considerable amount of pus material developed which probably was constituted of decomposed particles of food, mucus and infectious matter generally, which readily accounted for the horrible odor. There is possibly no doubt but that the final rupture of fistula took place the morning deglutition became impossible as he never strangled before on swallowing. Probably the esophagus was never entirely closed, only ceasing to perform its functions when larger opening occurred into trachea. He no doubt had been swallowing through a considerably narrowed lumen of the tube for months, and possibly years.

The lung infection developing during the latter days can, of course, be accounted for. The edges of ulcer were thin and sharply defined, and there was not much if any tumefaction around the seat of trouble. Whether it was an ulcerated condition partly closing the tube, and continually being kept active by retained and decomposing particles of food and gradually sloughing away the adjacent tissues and finally into trachea; or a malignant or tubercular in character, only the microscope could determine. It seems an unusual seat for either tubercular deposits to find lodgment unless secondary, or for a malignant tumor to originate, as I do not think there is any doubt but that the trouble started in the esophagus. It seems to me that a malignant tumefaction in this region would affect at least the deep cervical and mediastinal lymphatic glands enlarging them enough to be noticed.

There is no doubt but that the thoracic duct was interfered with in performing its functions, as it lay immediately against the esopha-

gus at this point, and a somewhat surprising feature of the case to me is that it did not rupture into tissues on the side and down into posterior mediastinum before eating its way through the thick cartilaginous walls of trachea. The thyroid gland was not looked for closely, but the probabilities are, was normal. The patient's voice was all the time very low and weak, and towards the last he could not speak at all. Whether this was due to pain on articulating, weakness, or to involvement of recurrent laryngeal nerve at this point of trouble could not be determined. The latter, I think, seems feasible. The fauces and pharynx seemed at all times during life to be in a healthy condition.

The abdominal cavity was next opened where

all the organs were examined for gross changes, but did not result in any findings of interest. The gall bladder was greatly distended, and the inside of stomach did not show any irritation to have existed recently. The seat of operation was looked at, and adhesions found to have commenced nicely. There was also no sign of peritoneal infection at the site of wound, kidneys, spleen, pancreas, appendix, etc., showed no changes.

I think all connected with this case are to be congratulated on the very rare opportunity they have had to witness one of the most unique cases of which the annals of surgery give any record.

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the State, changes of location, etc., are requested.

REMITTANCES.

Remittances should be made by check, draft, registered letter, money or express. Currency should not be sent, unless registered. Stamps in amounts under one dollar are acceptable.

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ADVERTISEMENTS.

Advertisements should be received by the 8th of the month to insure their insertion in the current issue.

CHANGE OF ADDRESS.

Change of address will be made if the old as well as the new address be given.

CONTRIBUTIONS TYPEWRITTEN.

In order to lessen liability of errors, contributions should be typewritten.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

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Editorials

THE THIRTY-SECOND ANNUAL SESSION OF THE ARKANSAS MEDICAL SOCIETY.

The Thirty-second Annual Session of the Arkansas Medical Society is now less than one month off, and practically all arrangements are completed for the event. President Stephenson has returned from his western trip and is delighted with the prospect of a meeting full of interest and of good attendance. Letters from physicians from all parts of the State write they expect to attend this meeting. The House of Delegates is composed of a majority of members who have been in attendance for a number of years, and business will be promptly dispatched.

TIME AND PLACE OF MEETING.

The House of Delegates will meet Tuesday morning, May 12th, at 9:30 a. m., under the presidency of Dr. Stephenson.

The Council will convene at 10:30 a. m., under the chairmanship of Dr. J. S. Westerfield, of Conway. Dr. B. D. Luck, Pine Bluff, is the secretary.

The first meeting of the General Session will convene at 9:30 a. m. At this meeting the president will deliver his address. Addresses of welcome by the Mayor and the President of the Pulaski County Medical Society will also be delivered. The scientific sections will open at 2:30 p. m. There will be morning and afternoon sessions.

THE PROGRAM.

Programs have been printed and mailed to every member of the society who has paid dues for 1908. All the sections are represented except that of Pathology. The program will be found in another place in this issue.

The social features of the meeting have been carefully planned, and it is believed that from this standpoint, nothing will be lacking to afford entertainment to our visitors. The Ladies' Program Committee of the Pulaski County Medical Society, have arranged a splendid program for the visiting ladies. Mrs. J. P. Shepard is chairman, and will attend to the regis-

tration of the lady visitors upon their arrival.

The meeting will close with a banquet at the Hotel Marion on the evening of the 15th, and it is earnestly requested that every member of the society remain over.

OUR GUESTS.

Dr. Joseph Price, of Philadelphia, will read a paper on the morning of the 14th, in the Section on Gynecology.

Dr. N. S. Davis, of Chicago, will read a paper in the Section on Practice, on the morning of the 15th.

Dr. Thomas H. Stucky, of Louisville, will read a paper in the Section on Practice on the morning of the 15th.

Dr. Ross Snyder, of Birmingham, will read a paper in the Section on Diseases of Children, on the evening of the 13th.

PLACE OF MEETING.

All meetings will be held at the Auditorium Skating Rink, at the foot of Arch street.

THE HOUSE OF DELEGATES AND THE UNDERGRADUATE.

It may be many years before a proposition of such far-reaching importance as the full and unrestricted admission of the undergraduate to county and state societies will come before the House of Delegates, and on account of, as it now appears, an almost equal division of sentiment, it is hoped that the matter will be approached, discussed and disposed of in a manner satisfactory to the Society. In fact, it should be conclusively determined whether the undergraduate has any rights the Arkansas Medical Society should respect.

We have refrained editorially from a discussion of the amendments offered at the last meeting of the society looking to the admission of the undergraduate preferring members from different portions of the State to give their views through the columns of the Journal. A diligent attempt to bring out in advance of the meeting a representative discussion of the subject failed, only a few members desiring to discuss it. It now remains for the House of Delegates to speak, and cool deliberation, a de-

sire to do justice both to the society and undergraduate, should and will mark its action.

BANQUET TO THE ALUMNI OF THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF ARKANSAS.

At the last meeting of the Arkansas Medical Society a number of the alumni of the Medical Department of the University of Arkansas, who were present, met in the private banquet hall of the Hotel Marion and perfected an organization known as the Medical Alumni Association of the Medical Department of the University of Arkansas. Dr. Charles E. Hurley, of Bentonville, '89, was elected President; Dr. W. A. Snodgrass, '92, of Little Rock, Vice-President, and Dr. S. E. Buchanan, '04, of Prescott, Secretary. The first meeting since organization will be held at the College Inn, Southern Trust Building, on the afternoon of May 13th. The Association meets annually, at the same place and time of the Arkansas Medical Society.

The Faculty of the Medical Department of the University of Arkansas will give a banquet at the College Inn, on the evening of the 13th, complimentary to the visiting members. Enough responses have been received to indicate a large attendance. An annual banquet is one of the social features of the reunion, and a happy time is anticipated.

Dr. John Dibrell, '00, Dr. A. Watkins, '99 and Dr. F. L. French, '82, compose the Committee on Arrangements.

POST-GRADUATE COURSE AT THE COLLEGE OF PHYSICIANS AND SURGEONS.

The Faculty of the College of Physicians and Surgeons have perfected plans for the opening of a three-weeks' post-graduate course in all the departments of medicine, the course to begin May 12th and end June 2nd. The course will consist of general laboratory and clinical work, didactic lectures, and a course in operative surgery on the cadaver. With the material supplied by the Physicians and Surgeons Hospital, the clinical advantages should be sufficient to sat-

isfy the most exacting doctor who wishes to take advantage of the opportunity to attend a post-graduate school in Arkansas.

OPENING OF THE FLORENCE SANITARIUM.

The Florence Sanitarium, a private institution, thoroughly equipped in all respects for the medical and surgical care and treatment of patients, was formally opened to the public for the reception of patients at Pine Bluff, on the 31st of March. Dr. A. C. Jordan, an active and valuable member of the Jefferson County Medical Society, is physician in charge, and is assisted by an able and experienced corps of trained nurses. We do not doubt but that Pine Bluff and the contiguous country will handsomely maintain such an institution, and we wish Dr. Jordan unbounded success.

Selections

CONCERNING LUMBAR PUNCTURE IN ECLAMPSIA.—In the *Zentralbl. f. Gyn.*, No. 22, Thies reports fourteen cases in which lumbar puncture had been practiced in Zweifel's clinic. Except to a limited extent no practical result was obtained. The coma was apparently not so deep but no constant effect was observed on the number of convulsions.

Thies found, as other observers had done, that in eclamptic women the pressure in the subarachnoidal space estimated by Quinke's apparatus was constantly increased. In seven cases it ranging from 150 to 200 mm., in one it varied between 210 and 390 mm., in another the pressure rose to 600 mm. during an interval between paroxysms; in four others it fluctuated between 250 and 300 mm., the normal pressure being 100 to 120 mm.

In fourteen women who had died of puerperal eclampsia histological examinations were made at the neurological institute of the Vienna University. Marked alterations in the nerve structures were found, in the cell plasm, and also in the cell nucleus. This was true not only of the spinal cord but also of the cerebral motor nerves, and what is of special importance, in

the cells and nuclei of the respiratory center.

In three of Thies' cases respiration just before death gradually became intermittent without assuming the Cheyne-Stokes type, and ceased altogether with no evidence of pulmonary oedema, which is the usual cause of death in eclampsia. Artificial respiration and respiratory stimulants were of no avail. Thies thought the puncture was a factor in the fatal issue.

Pollack observes that the quantity of the subarachnoidal fluid withdrawn was too small to have reduced the pressure below the normal and that the lumbar puncture could not alone account for the result. He thinks it more probable that the deaths ensued from degenerative changes in the respiratory nerves; that the influence of these degenerations was too great to be successfully combatted by lowering the cerebrospinal pressure.

The belief formerly entertained that the respiratory failure is the direct result of the convulsions and the coma is no longer tenable. The essential cause of the respiratory symptoms is rather the alterations in the respiratory nerve cells. The blood becomes overcharged with CO₂ and this may happen in eclampsia without convulsions.

Whether the changes in the nerve cells are due to an as yet unknown toxin or to the high pressure cannot at present be determined. Possibly both these causes are concerned.—*Emil Pollak: Zentralbl. f. Gyn.*, No. 31, 1906.—*J. of N. Y. Medical Society.*

ABORTION CAUSED BY X-RAYS.—In a short article Lengfellner (*Munchener medicinische Wochenschrift*, No. 44, 1906) cites experiments on guinea-pigs, which fully confirm those of Tellner, showing that even short exposure of the abdomen to the action of the rays is able to destroy the life of a fetus even shortly before term. Alterations were found in the ovaries suggesting sterility. The cause of the fetal death could not be determined microscopically.—*Therapeutic Gazette.*

STUDY OF CARGILE MEMBRANE.—An experimental and histologic study of Cargile membrane was made by Craig and Ellis, (*Annals of Surgery*), with reference to its efficacy in pre-

venting adhesions in the abdominal and cranial cavities and around nerves and tendons, and its ultimate fate in the tissues. The most distant time at which they found unchromicized Cargile membrane existing intact, microscopically, within the peritoneal cavity, was the fourteenth day; in most instances it had disappeared to microscopic view much sooner. The earliest time at which they found the membrane had disappeared over the area of actual denudation was on the third day. Unchromicized Cargile membrane was buried in living animal tissue, as when placed around tendons and nerves, or in muscle, apparently is absorbed sooner than when placed within the peritoneal cavity. In no instance was so much as a fragment of the membrane observed macroscopically as late as the fifth day, though in the fragmental state membrane was noted microscopically as late as the fourteenth day. Chromicized Cargile membrane when placed within the peritoneal cavity or when buried in living animal tissue, remains unabsorbed much longer than does the unchromicized variety. The two varieties doubtless bear relatively the same relation to each other, so far as absorbability is concerned, as do chromicized and unchromicized catgut. While the unchromicized, and to a less extent the chromicized, variety will adhere firmly to a surface denuded of peritoneum, when such surface is relatively dry, yet neither can be depended on to remain where placed, unless anchored by some method, in a situation which is subject to peristaltic activity. A logical deduction from the results of the experiments seems to warrant the belief that neither variety of the membrane is of value in preventing adhesions within the peritoneal cavity. In every instance, the membrane, until absorbed, appeared to act as a foreign body, and therefore as an irritant. Craig and Ellis believe, from results of their observations that both varieties of the membrane are of value in preventing adhesions to wounded nerves and tendons when such structures lie in tissues which have been subjected to trauma, operative or otherwise. Their conviction is that for this purpose the chromicized variety is the more valuable, and that several layers of either variety of the membrane, when placed around

tendons or nerves, afford a safer and better protection than one layer. When used in the cranial cavity to replace destroyed or removed dura, the unchromicized variety would be exceedingly difficult to handle on account of its being unmanageable when moist; and on account of the rapidity with which it dissolves, it would be of no special value in this situation even though it could be used with ease. Owing to the facility with which the chromicized variety can be handled, its greater toughness and increased power to resist absorption, it would prove of greater value in replacing the dura. These studies indicate that the membrane is destroyed by a lytic substance, or substances contained in the body fluid. The celloidin capsule experiments, even though bacteria were present in one, show that the membrane is softened, and at least partially absorbed by body fluids without the presence of cells. In the tissues it is split into fibrils, this change being accompanied or followed by the penetration of formative cells of the new tissue enclosing it. Fragmentation, disintegration and absorption finally ensue. Phagocytosis may be safely excluded as a chief important contributing cause.—*J. A. M. A.*

THE RESPIRATORY COMPLICATIONS OF INFLUENZA.—In speaking of the treatment of these complications of influenza MacKenzie in the *Practitioner* for January, 1907, states that as we have no specific remedy, treatment has to be based on symptoms, and the first symptom of importance is the cough. A great many remedies have been tried, and we cannot say that any remedy is specially efficacious. Where the cough is dry and paroxysmal, heroin hydrochloride in doses of from 1-36 to 1-12 of a grain may be given at intervals of from one to two hours. Barley water, linseed tea, toast and water, or warm milk may be sipped occasionally. The following linctus has been found to be efficacious where the cough is frequent and severe:

℞ Morphinae hydrochlor., gr. $\frac{1}{2}$;
 Apomorphinae hydrochlor., gr. $\frac{3}{4}$;
 Acid. hydrochlor. dil., min. xx;
 Syr. prun. virginianae, f $\frac{3}{4}$ ss;
 Aquæ, q. s. ad f $\frac{3}{4}$ ij.

Ft. linct. Sig.: One drachm occasionally.

When there is bronchitis, a mixture containing citrate of ammonia, citrate of potash, and ipecacuanha wine is useful:

℞ Liquor. ammon. citratis, ʒjss;
Potassii citratis, gr. xv;
Vini ipecac., min. v;
Aquæ, q. s. ad ʒj.

Take as one dose.

Another mixture which is useful is a formula in use at the Brompton Hospital. This is:

℞ Sodii bicarb., gr. xv;
Sodii chloridi, gr. v;
Spirit. chloroform., min. v;
Aquæ anisi, f ʒj.

Take as one dose.

When the secretion is thick and viscid, and expectorated with difficulty, preparations containing opium are contraindicated, and should not be given. Linseed or linseed and mustard poultices or turpentine stupes sometimes give much relief, when there is tightness and soreness of the chest.

The same remedies may be given in cases of pneumonia. Here the main indication is to maintain the patient's strength. The chief danger is cardiac failure, and when there are signs of failing heart, stimulants should be cautiously administered. Digitalis, strophanthus, caffeine, and strychnine are all useful drugs.

Huchard recommends 30 to 50 minims per diem of a solution of digitalis (1 in 1000). Finkle advises the use of camphor in heart failure, camphorated oil being given subcutaneously.

Oxygen inhalations will relieve when there is marked-dyspnea. Alcohol is indicated when there is prostration and failing heart, and champagne and brandy are specially valuable. The amounts to be given must be regulated by the effects on the heart and pulse in individual cases.

The diet should consist mainly of milk, eggs, beef tea, chicken broth, rusks, arrowroot, Benger's food, and calf's-foot jelly. The hygiene of the mouth and teeth should be particularly attended to. The bowels should be acted on if necessary.

Fresh air is the best prophylactic against in-

fluenza. It is also a sovereign remedy in the treatment of both the acute and chronic manifestations of the disease in the respiratory tract. Nothing is more striking than the way in which influenza spreads in the stuffy and ill-ventilated hotels, in which people have usually to live who travel in search of health. Out of many hotels in a well-known health resort, the writer knows of one only in which the visitors escaped influenza during several winters, and that was a hotel in which, thanks to the presence of a doctor, who knew the value of fresh air, the windows in the public rooms and lounges were kept constantly open. How long it will be before the general public in this country will come to recognize that open windows are health-giving, instead of being dangerous, one cannot tell. The people who have been brought up with the idea that the slightest breath of air which comes into a house from outside may give them a chill are not likely to change their views for all our assurances that they are mistaken. These are the people who insist on closed windows in trains and hotels, and in all places of public resort, and it is through their mistaken prejudice that influenza spreads as it does. But this is by the way. What the author wants to insist on is the advantage which accrues to the influenza patient if he is treated rationally and sensibly, and if the air of the sick-room is rendered wholesome by free opening of windows.

Many doctors still cling to the old ideas that bronchitis, bronchopneumonia, and pneumonia must be treated in a warm room, and that it is dangerous to allow the temperature of the room to get below 62 degrees F.

But purity of the air which the patient gets to breathe is of far greater importance than its temperature. In fact, up to a certain point the cooler the air is the more invigorating and refreshing it is, and it is senseless to deny to the patient fresh air from outside, and allow him a draught of cold oxygen from a cylinder.

Open-air treatment is the best restorative in chronic influenzal respiratory affections, and the author is quite as much impressed by the results obtained therefrom in these troubles as in chronic pulmonary tuberculosis.

The author suggests some hotel or sanatorium,

run on open-air lines, for the reception of non-tuberculous patients convalescing from influenza, of from some other acute illness. It would supply a felt want, and would do much to promote the rapid and complete recovery of its visitors.—*Therapeutic Gazette*.

GONORRHOEA IN WOMEN.—Coe, (*Medical Record*), in speaking of the pathology of gonorrhœa in women, states that the old views as to the site of primary infection have been considerably modified. It was formerly held that the vagina was first infected, but we know now that the intact mucosa of this canal is quite resistant to the action of the gonococcus, and that germ may enter the cervix at the time of the impure coitus, with or without accompanying infection of the urethra, Bartholinian glands, or vulva. Moreover, it is a fact often noted that the most virulent specific vaginitis may not extend beyond the cervical canal. It has never been satisfactorily explained why such extensive changes in the tubes should result from an infection apparently so mild that its inception was not noticed by the patient, or why a severe type should remain localized below the os internum. Doubtless the different powers of resistance in the tissues of different individuals account for this irregularity. It has been demonstrated beyond a doubt that the mere presence of Neisser's cocci in the secretion does not account for all the tissue changes that occur. They possess toxic properties which are active after the microorganisms themselves have perished. Bacteriologists are familiar with the frequent occurrence of mixed infection, and it is probable that the *Staphylococcus aureus* and colon bacillus remain active after the gonococci have disappeared. Stone observes that the common idea that the urethra rarely escapes being involved early in the course of the disease seems to be true, although functional disturbances of the bladder from other causes are so frequent in women that the physician is often not consulted until the urethritis is better or well. On account of the shortness of the female urethra, its entire length is usually involved. but the course of the disease is usually milder and of shorter duration than in the male. It is the ex-

perience of the writer that, with appropriate treatment, the disease lasts only from four to six weeks, but that without treatment the involvement of Skene's ducts occurs in a large number of cases, thus persisting as a local complication for an indefinite period of time. Based upon his observation of the natural course of the disease, the writer's treatment has consisted (1) in proper instructions relative to diet and the contagiousness of the disease; (2) in copious draughts of plain water and such internal medication as will render the urine bland, of which the tincture of hyoscyamus and potassium bicarbonate have been as efficient as any; (3) in the applications of heat to the external genitals, preferably by means of hot sitz baths; and (4) the most important of all, in frequent cleansing of the external genitals with plain or mildly antiseptic solutions, in order to prevent infection of Skene's ducts and the ducts of the Bartholinian glands. Injections in the acute form of the disease, the writer believes, are unnecessary and perhaps harmful. The writer's general conclusion in regard to the disease in the female urethra, then, is that it is usually less important than in the male, the chief thing being the frequent involvement of Skene's ducts whereby reinfection of other parts is always liable to occur, and the constant danger of the transmission of the disease to others. The absence of glands and the character of the vaginal epithelium render this part of the genital tract comparatively invulnerable to the invasion of the gonococcus, except in young girls before puberty, in adult women during pregnancy and the puerperium, and in elderly women at the time of the menopause. A redness and irritation from the stagnation of gonorrhœal discharges from the uterus often occurs, but a few douches with a mildly antiseptic solution quickly clears it up. The infection of these ducts, Bartholinian glands, is considerably less frequent than that of the urethra, and usually occurs later in the disease. It is the result, probably, in most instances of the stagnation of gonorrhœal discharges about the genitals, and thus is largely preventable. The swelling of the duct from the retention of pus in the closed duct is well known. Not infrequently, however, if seen early, the opening is

still patent, and pus may be pressed out, and by daily milking its closure may be prevented until the inflammation has disappeared. The author states that there is no way of treating the inflammation in the duct itself, except by incision and drainage.—J. A. M. A.

• **EXPERIMENTAL SYPHILIS.**—Although it is claimed by Klebs as long ago as 1879 that syphilis could be artificially produced in apes, the subject did not receive much attention till a few years ago, when Metchnikoff and Roux took up the work afresh at the Pasteur Institute. The success of these investigators led to further research, in which a prominent part has been taken by Neisser of Breslau and Finger of Vienna.

The researches of Metchnikoff and Roux were carried out on the higher anthropoid apes, the chimpanzee especially being used. It was shown that syphilis could be inoculated into these animals with the production of a primary lesion, after a period of incubation, followed later by secondary manifestations. Metchnikoff and Roux laid stress on the fact that anthropoid apes were necessary, but later experiment has shown that some varieties whose relationship to man, as shown by the precipitin test, is remote, may contract syphilis. In the more remote species of ape, however, the disease is not so typical, the incubation period is usually shorter, and the secondary manifestations are abortive or even lacking, according to the nearness in blood relationship to man.

The revival of the experimental work on apes has led to a similar revival on rabbits. It is not generally known that in 1881 Haensell claimed that he was able to produce inoculation syphilis of the iris and cornea in rabbits. In one animal he even described gummata in the liver. Schucht, working with Neisser, has repeated these experiments, and has been able to confirm them. Using an emulsion of inguinal glands from fresh cases of lues, which he inoculated into the anterior chamber of the vitreous, he was able to produce in some instances a parenchymatous keratitis, in others a lesion which resembled a gummatous iritis. The lesion appeared only after a long period of in-

cubation, was not at all comparable to an ordinary infectious eye process, and was always accompanied by the *Spirachæta pallida* in large numbers. In no animal did Schucht find evidences of generalization of the process, none showed lesions of the internal organs, and in none did an examination of the blood serum show evidences of the disease.

It is evident from these researches that syphilis is more or less transmissible to the lower animals, and that, although the best chances of success are gained by using animals closely allied to man, some remote from him in blood are also susceptible. This experimental work has thrown some light on aspects of the problem of syphilis which were, at best, poorly illuminated by clinical experience. It has been shown many times in the experiments on monkeys that the organism of syphilis belongs to those which must enter the body in a particular way, in this instance through an abrasion. If the virus be introduced into the blood, into the peritoneal cavity, or subcutaneously it fails not only to produce the disease, but also to produce any protection against a later inoculation of the surface. The period of incubation of the disease, as shown by the experiments, corresponds very closely, both in monkeys and in rabbits, to that which clinical experience had laid down as the period in man. In rabbits the average period of incubation is about twenty-nine days; in apes the average is a little lower, and, as a rule, the disease seems least virulent in them when the incubation is short. The question of the infectiveness of the blood has also been cleared up to some extent, and it has been shown that even six months after the onset of the disease it still contains the causal parasite.

The infectiousness of the tertiary lesions has been proved both by Finger and Landsteiner and by Neisser, though it is not claimed that all tertiary lesions are equally infective, and many of the experiments were failures. The infection of the spermatie fluid has likewise been demonstrated, though here, again, the percentage of cases in which such infectiveness could be shown was small. In many ways the work has led to valuable discoveries, and more will probably follow.—J. A. M. A.

Communications

ANNUAL MEETING OF THE ARKANSAS STATE MEDICAL SOCIETY.

To the Editor:

As requested, it is my pleasure to contribute this article on the coming meeting of our State Medical Society, the burden of which shall be the urging of a full attendance. As it is, the program is now complete and perhaps the best that we have ever had; men of national fame will be with us to contribute their part in helping to make the meeting one of the most brilliant and beneficial ever held. Dr. Joseph Price, of Philadelphia, Dr. N. S. Davis, of Chicago, Dr. Stucky, of Louisville, and Dr. Ross Snyder, of Birmingham, will be our guests during the meeting.

To our deep regret, Dr. Mayo, of Rochester, and Dr. Simmons, of Chicago, both have engagements which will preclude a visit with us, or we should have had the pleasure of having these great men with us also. We had hoped for some time that Dr. Simmons could make the State Medical Society a talk on medical organization, and had come to the conclusion that these hopes were to be realized; and we were also equally hopeful that Dr. Mayo would be with us and deliver an address on gall bladder surgery, both of these gentlemen having in a way promised last year to make an effort to be with us. But one can never tell where the lines of fate may lead. So at this writing both of these esteemed medical friends have sent in their regrets, coupled with a desire to be with us next year. Be that as it may, the meeting will not be lacking in shining lights, as those who will be here stand pre-eminently high in the medical profession.

But enough along this line. What we want to say is that we expect a full attendance of our members; indeed we insist that every member of the Arkansas Medical Society, who can come, should do so, and, in addition to this, gentlemen, let me urge upon you to bring as many non-members as you can—I mean, of course, men who are eligible for county membership. The attendance at the State meeting of this class of gentlemen, who are intending to unite

with their county society, will perhaps inspire them and fill them with some degree of enthusiasm, and to such an extent, that they will go home and make application at once for county membership. This is one way to get new material into your county society, and in addition to this, it is one way to do your brother practitioner some good. We have had sufficient to say along the line of what we expect of you after you arrive; consequently we shall say nothing more about that, only that we shall expect a full delegation of the members of the House of Delegates to be present promptly on the morning of May 12, as the House of Delegates will convene the day before the general session, and so far as can be done the business will be transacted and completed that day. One thing is sure, that the business session shall not in any way interfere with the scientific work on the 12th, it will finish it up on a date to be agreed on later.

While we are urging upon the members of the House of Delegates to be promptly on hand on the morning of the 12th, we would like also to have as many of the members to come with the delegates as would like to be with them. The members will be welcomed and accorded every courtesy possible.

Now, gentlemen, one word in conclusion. Be sure to attend this meeting. We expect five hundred members present; we expect two hundred and fifty ladies to be with us. Please do not disappoint us in any way.

With my kinest regards, I am

Yours truly,

C. C. STEPHENSON,

President Arkansas Medical Society.

Little Rock, April 30, 1908.

ON THE ADMISSION OF THE UNDER- GRADUATE.*

Arkansas City, April, 1908.

To the Editor:

Responding to your request for an article for the Journal on the subject of the disposition our county societies shall make of the non-graduate members of the profession within

their domain, it can hardly be reasoned otherwise than that the question is one solely for the county society itself to solve. I fear for the outcome of any move on the part of the state society looking toward the settlement of the question by dictating to the county society in the management of its internal affairs. Since, however, your question implies my opinion of the subject as related to the county societies themselves, I will advance some views which I have reached as the result of my several years as Councilor, and also as the result of being more or less associated with the unschooled members of the profession for a number of years. I have observed that there are two distinct classes of those who are not graduates:

First, those who earnestly desire to graduate and be in the ranks of progressive medicine and who now engage in practice to get on a financial footing that will enable them to attain that which they now desire. The members of this class desire to affiliate with their county societies for their personal benefit and are most worthy. By association with the society they receive instruction in the principles of ethics and become allies of our noble profession. Surely we can not allow any selfish motive to hinder us in aiding in every possible manner these struggling candidates for admission to the rank and file of a progressive organized profession.

Secondly, those who have passed the legal requirements of our State and who are eminently satisfied with their status as practitioners, and who proceed to practice medicine on the principles they would follow if engaged in a mercantile pursuit. They are not known as quacks by the laity, and yet their unscientific methods stamp them so with a progressive profession. They are unable to see any purpose in any principle of ethics other than a selfish motive on the part of the organized profession. They are satisfied with medicine as they know it, and instead of improving this branch of science, they can not but tend to drag it to a lower standard. One has recently asked me to aid him in securing an appointment as examiner for a life insurance company, and I happen to know that he has failed to provide himself with the

necessary apparatus and reagents to do a simple urinalysis. He was licensed by our State Board over three years ago after passing a satisfactory examination, and yet his office to-day has no more equipment for the practice of medicine than the office of a man engaged in mercantile pursuits. A small medicine case is his chief asset. No doubt our State Board could do much toward improving the class of doctors that now engage in practice in the State. However, a number of the members of the Board fear they may arouse a spirit of antagonism that will result in adverse legislation. This is no doubt accountable for the large number of undergraduates who present themselves before the Board. The fact that only a very few states admit undergraduates to the examination room, makes it imperative that our present law be amended to permit only graduates to appear before the Board. In the meantime we should endeavor to maintain an influence for good over the undergraduate and make of him an ally rather than an enemy. If the county society should decide to allow him membership in degree only, or in full, I can see no reason why they should not do so. In some counties in this Councilor District this has been done with happy results. However, I should add that there were restrictions in each instance in regard to the state society. I do not doubt but that the question will gradually aright itself and presently all will be graduates and members of both county and state society.

VERNON MACCAMMON, M. D.

A CASE OF SCREW-WORMS.

Sheridan, April, 1908.

To the Editor:

The following case is, I think, of sufficient interest to report:

I was called on November 2, 1907, to see a Mr. D, whom I found suffering with his face and head. The face was very much swollen, the left eye being completely closed. His temperature was 103 F., heart's action good, but increased. There was a bloody discharge from the nose of a serous nature and very offensive.

He had a physician to see him three days

previous to my visit who had diagnosed the case as erysipelas, for which treatment was given.

I made as thorough an examination as possible. Having no instruments with me at this visit, it was impossible to examine the nasal cavity thoroughly, so I advised washing out the cavity with peroxide of hydrogen, every two hours. I gave an anodyne to relieve the pain, and promised to call again early next day.

I saw the patient on the morning of the 3rd. Conditions were pretty much the same as the day before except the pain, which was almost unbearable.

I gave chloroform by inhalation to relieve the pain, and then made an examination, using a nasal speculum and head mirror for this purpose. I discovered something in the nasal cavity in or near the frontal sinus which I removed with a pair of forceps, and which on examination, proved to be a worm. I then cocainized the nasal cavity, after which used a spray of chloroform.

The worms came out in great quantities, some going to the throat, and others coming out at the nose. I removed in all as a result of this spray 65 worms. I then sprayed the nose with peroxide of hydrogen every two or three hours until the next day, when I returned again and cocainized the nose and sprayed with chloroform, bringing away a great number of worms.

I made an incision near the bridge of the nose over the malar process of the superior maxillary down to the bone, where I found a number of worms imbedded. I washed them out with peroxide of hydrogen, cleaned the cavity thoroughly and sutured the wound with silk, which healed rapidly by first intention. I continued to spray the nasal cavity every three or four hours during the day for three or four days. I removed in all 115 worms. The patient improved rapidly, and was up and came to my office in five days afterwards. He complained of a pain in his ear, but no pain in face or head.

After another careful examination, I referred him to Dr. Breathwit, of Pine Bluff, who wrote me as follows:

"On examination I found the mucus membrane

covering the inferior and middle turbinates, also septum, entirely necrotic. The nasal cavity was flushed with peroxide, then wiped with cotton-wound probe bringing away the necrotic membrane, exposing inferior and middle turbinates and a number of dead screw-worms. After the cavity was thoroughly cleansed I cut away the anterior aspect of the inferior and middle turbinates, and the anterior aspect of superior turbinate, for the purpose of facilitating drainage from the frontal sinus. After cleansing the nasal cavity a second time I made a thorough application of silver nitrate, one dram to the oz. to the whole cavity.

"Like you, I suspected involvement of the maxillary sinus but could elicit no evidence of same after a very thorough examination; this being true I permitted the patient to return home to your care, and asked him to report to me within three days, which he never did. I congratulate you on your diagnosis and treatment of this very serious condition."

The patient made a rapid recovery, and is in fine health at the present time.

The worms were about 3-4 of an inch long, and 1-8 of an inch in circumference.

J. L. BUTLER, M. D.

District and County Societies

GARLAND COUNTY-HOT SPRINGS MEDICAL SOCIETY.—The Garland County-Hot Springs Medical Society met at Hot Springs, Tuesday evening, April 2, and the following officers were elected for the ensuing year:

President, Dr. W. V. Laws, Hot Springs;

Vice-President, Dr. J. W. McClendon, Hot Springs; Treasurer, Dr. J. S. Horner, Hot Springs; Secretary, Dr. M. F. Mount, Hot Springs. Delegates, Drs L. R. Ellis, J. S. Wood and J. M. Proctor.

The society meets the first and third Tuesdays in each month. At the next meeting, which will be held on the 1st, Dr. J. C. Minor will read a paper on "Practical Points in the Treatment of Nephritis," and Dr. E. H. Ellsworth on "The Pathology of Ovarian Tumors, With the Exhibition of Specimens." Drs. Collings and

Thompson will exhibit specimens of uterine carcinomata and myomata.

FRANKLIN COUNTY.—The Franklin County Medical Society holds its regular meeting Tuesday, April 8th, with six members present. Dr. H. H. Turner, the president, presiding. The annual election of officers was held with the following result: President, Dr. W. W. Rambo; Vice-President, Dr. E. W. Blackburn; Secretary-Treasurer, Dr. Thos. Douglass; Delegate to the State Society, Dr. J. T. Crocker; Alternate, Dr. W. W. Rambo.

An interesting case of Friedreich's ataxia was exhibited by Dr. Rambo. This was the first meeting since January. Regular meetings are held the first Tuesday in each month, at 10 o'clock a. m.

GREENE COUNTY.—The secretary of the Greene County Medical Society, in endeavoring to get the data asked for on the blank reports sent to the secretaries of the component societies, elicited the startling information that in Greene county there were five physicians practicing who had never registered. Two of these have been in practice for many years. McKenzie, one of the number practicing illegally, claimed to be a graduate of King's College, Aberdeen, Scotland, but a letter from the Dean, under date of March 27th, positively states that no such name appears upon the roster of graduates.

We heartily commend the diligence and example of Dr. Wilson to other secretaries of component societies, and suspect that if they would employ the same energy and interest, there would be some revelations made in every county in the State.

SHARP COUNTY.—At a regular meeting of the Sharp County Medical Society, the following officers were elected: President, Dr. Thos. J. Woods, Evening Shade; Vice-President, Dr. William Johnston, Hardy; Secretary, Dr. W. E. Pounders, Sidney.

BOONE COUNTY.—The Boone County Medical Society met at Harrison, April 7th, with the following members present: Dr. F. Kirby, President; Drs. Routh, Reich, Routh, Vance,

Fowler, Baines, Potts, Crebs and L. Kirby. Visitor, Dr. J. Albright.

DIABETES MELLITUS.

Dr. J. L. Reich reported a case of diabetes mellitus in which the administration of codein in doses of 12 grains daily caused the disappearance of sugar in the urine. The withdrawal of the drug for a few days would be followed by the reappearance of sugar.

GALL-STONES.

Dr. H. L. Routh reported a case of gall-stones occurring in the practice of Dr. C. M. Routh, in which at operation 175 stones ranging in size from a wheat grain to a hazel nut, were removed. Exhibition of stones.

Dr. C. M. Routh read a paper on "Diseases of the Second Year of Childhood," and Dr. L. Kirby on "Prostatectomy, With Report of Two Cases, One Death and One Recovery."

CONGENITAL FIBROID IN CHILD.

Dr. C. M. Routh reported a case of a large congenital fibroid situated on the left side of the forehead extending up over the eye and extending up beyond the border of the hair. The tumor was removed and the child was doing well.

Dr. Baines reported a case of night terrors, and Dr. Reich one of extreme anteversion of the uterus.

Dr. Geo. F. Elam was granted a transfer to the Marion County Society.

The society instructed its delegates to vote against the amendment to the constitution allowing undergraduates membership in the county and state societies.

The following officers were elected:

President, Dr. Swartz Baines; Vice-President, Dr. C. S. Crebs; Treasurer, H. L. Routh; Librarian, A. J. Vance; Secretary, L. Kirby; Delegate, Dr. C. M. Routh.

The next meeting will be held at Harrison, July 7th, 1908.

LAWRENCE COUNTY.—The Lawrence County Medical Society met in regular session, Wednesday, April 1st, 1908. Considerable time was taken up in clinical work, after which the elec-

tion of officers took place as follows: President, Dr. A. L. Peacock; Vice-President, Dr. J. C. Land; Secretary, Dr. H. R. McCarroll; Treasurer, Dr. J. C. Hughes; Delegate, Dr. J. W. Morris; Alternate Delegate, Dr. G. A. Warren; Censors, Drs. E. T. Ponder, W. A. Smith, and J. O. Hatcher. Those present at the meeting were, Drs. A. L. Peacock, J. W. Morris, H. R. McCarroll, W. A. Smith, J. R. Crigler, J. C. Swindle, J. C. Hughes, E. T. Ponder, J. M. Stephens and G. Max Watkins.

JOHNSON COUNTY.—The regular monthly session of the Johnson County Medical Society was held at Clarksville, in the office of the secretary, on April 6th. On account of the absence of the president, the society was called to order by the vice-president, Dr. Burgess, and the following members answered to the rollcall: Drs. Burgess, Cook, Blakely, Kolb, Murphy, Smith, Cowan and Graves. The minutes of the last meeting were read and adopted.

Drs. Blakely, Allen and Graves reported interesting clinical cases, after which a paper on measles was read by Dr. Burgess. All the members present participated in the discussion.

This being the regular meeting for the annual election of officers, the following were elected for the ensuing year:

President, Dr. W. F. Smith; Vice-President, Dr. C. S. Allen; Secretary, Dr. L. A. Cook; Delegate, Dr. W. F. Smith.

Dr. J. P. Blakely was appointed by the society to prepare and read a paper on "Gastro-Intestinal Diseases" at the next meeting.

POPE COUNTY.—The Pope County Medical Society held its regular quarterly meeting at Russellville, on the 19th of March. Dr. J. M. Campbell was re-elected president and Dr. Gaddy re-elected secretary. Dr. L. Gaddy was elected delegate to the state society.

The application of Dr. F. T. Hayes, of Scottsville, was presented for membership, and upon ballot he was unanimously elected a member of this society.

MISSISSIPPI COUNTY.—The secretary of the Mississippi County Medical Society writes that the next meeting will be held at Blytheville,

on the 16th of April, and that every member in the county is expected to attend. The program for the meeting is a splendid one, consisting of four papers, and is as follows:

1. "Pathology of Pneumonia," by Dr. Nall.
2. "Microscopy," by Dr. Crawford.
3. "Congestion in Malaria," by Dr. Campbell.
4. (Title to be supplied), Dr. Parker.

Officers of the society are: President, Dr. Oleander Howton; Vice-President, Dr. Robert P. Nall; Secretary, Dr. Thos. G. Brewer. Dr. Robert P. Nall, of Armored, was elected a delegate to the state meeting, and Dr. Finley A. Robinson, alternate.

CRAIGHEAD COUNTY.—At the regular monthly meeting of the Craighead County Medical Society the following officers were elected:

Dr. C. M. Lutterloh, Jonesboro, President; Dr. B. L. Harrison, Jonesboro, Vice-President; Dr. L. H. D. Pierce, Treasurer; Dr. G. Waddell, Jonesboro, Secretary; Dr. C. M. Lutterloh, of Jonesboro, was elected a delegate to the State Society and Drs. Waddell, Smith and Harrison, alternates.

STATE MEDICAL BOARD EXAMINATION.

The Secretary of the State Medical Board of the Arkansas Medical Society, furnishes the following information concerning the examination held at Little Rock, April 14th:

Total number of applicants examined, 69.

Total number passed, 38.

Total number failed 31.

Number of whites, 62.

Number of colored, 7.

Successful applicants: Scott Appleby, Palestine, Ark.

R. C. Allen, Bradford, Ark.

F. M. Duckworth, Siloam Springs, Ark.

E. D. Erwin, Monticello, Ark.

W. S. Ellis, Smead, Ark.

C. A. Fowler, Supply, Ark.

J. P. Ferguson, Sweden, Ark.

N. E. Fraser, Step Rock, Ark.

C. W. Garrison, Fort Smith, Ark.

J. A. Gatlin, Memphis, Tenn.
 W. A. Harvey, St. Louis, Mo.
 W. W. Hatcher, Imboden, Ark.
 Robt. Hardin, Conway, Ark.
 J. W. Hutton, St. Louis, Mo.
 J. E. Jones, Bearden, Ark.
 G. U. Jamison, Texarkana, Tex.
 B. F. Jungkind, Little Rock, Ark.
 P. E. Johnson, Lake Village, Ark.
 W. B. Kolbe, Ola, Ark.
 O. R. Kelley, Carthage, Ark.
 C. S. Means, Charleston, Ark.
 W. Majors, Paragould, Ark.
 M. P. McNeil, Little Rock, Ark.
 P. R. Powell, Little Rock, Ark.
 J. E. Redden, Little Rock, Ark.
 L. D. Reagan, Little Rock, Ark.
 S. W. Ruff, Little Rock, Ark.
 W. J. Rutledge, Little Rock, Ark.
 H. C. Riley, Little Rock, Ark.
 W. S. Simpson, Little Rock, Ark.
 C. Strait, Birta, Ark.
 L. N. Sickler, Little Rock, Ark.
 J. W. Staton, Bonanza, Ark.
 G. C. Stover, Center Ridge, Ark.
 D. M. Switzer, Little Rock, Ark.
 M. W. Talbot, Bernice, La.
 L. M. Thomas, Fort Smith, Ark.
 E. H. Wilkes, Little Rock, Ark.

CHANGE OF ADDRESS.

Dr. E. M. Black from Yancy, Ark., to Pecos, Texas.

Dr. C. J. Steed, from Hurricane to —.

THE ALUMNI REUNION OF THE KENTUCKY SCHOOL OF MEDICINE AT THE 59TH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION.

To the Alumni of the Kentucky School of Medicine: During the meeting of the American Medical Association there will be a reunion and banquet of the Alumni of the Kentucky School

of Medicine at the Auditorium Hotel, June 2, 1908, at 6:30 p. m.

The members of the faculty will be present, and hope to meet the alumni from the entire country.

An attractive musical program is being arranged, and there will be addresses from the alumni and members of the faculty.

Address all communications to Dr. J. R. Pennington, Secretary of the Alumni Committee, appointed by the American Medical Association for the Kentucky School of Medicine, 103 State St., Chicago.

THE ALUMNI REUNION OF THE NORTHWESTERN UNIVERSITY MEDICAL SCHOOL AT THE 59TH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION.

The approaching meeting of the American Medical Association will be held in Chicago, June 2-5, 1908. The Northwestern University Medical School is fortunate this year in having a combination of the Alumni week with a meeting of the American Medical Association. One of the special features of this session of the American Medical Association is to be a series of alumni reunions of the different medical colleges in this country. Owing to the central location of Chicago and its unusual opportunities, we anticipate a larger attendance than usual. A cordial invitation is extended to every graduate of the Northwestern University Medical School to be present at the annual alumni dinner which will be held on Tuesday evening, June 2, at 6 p. m., at the New Illinois Athletic Club, 145 Michigan avenue.

ROBERT T. GILLMORE,
 Chairman Alumni Week Committee.

FREDERICK R. GREEN,
 Member of Alumni Committee for the N. W. University Medical School.

POSTGRADUATE COURSE OF STUDY
FOR COUNTY MEDICAL SOCIETIES.

Arranged by John H. Blackburn, M. D.,

Bowling Green, Ky.

FIFTH MONTH.

FRACTURES AND DISEASES OF BONES.

First Weekly Meeting.

Histology of Bone.....
Anatomy of Bones.....
Periostitis: Pathology, Symptoms and Treatment

Second Weekly Meeting.

Osteomyelitis: Etiology and Pathology
Osteomyelitis: Symptoms and Treatment...
Caries of Bone. Necrosis of Bone.....
Tumors of Bone

Third Weekly Meeting.

Tuberculosis of Bone.....
Syphilis of Bone

Fourth Weekly Meeting.

Fractures: Varieties, Causes

Fifth Weekly Meeting.

Fractures of Neck of Femur.....
Pott's Fracture: Pathology, Treatment....
Colles' Fracture: Pathology, Treatment.....

Monthly Meeting.

Principles in the Treatment of Fractures..
Tuberculosis of Bone.....
Osteomyelitis

FIRST WEEKLY MEETING.

ANATOMY.

Classify bones as to shape. General structure of bone. (a) Physical, (b) chemical properties of bone. Demonstrate fresh specimen. Periosteum and its functions. Cancellous structure. Nutrient blood vessels. Influence on location of suppurative or tubercular degenerations. Lymphatic vessels. Distribution. Nerve supply of bone.

HISTOLOGY.

Haversian system, its canals, lacunæ, canaliculi, etc. Contents of each. Demonstrate microscopic sections. Development of bone. Os-

sification in membrane. Ossification in cartilage.

PERIOSTITIS.

Most frequent cause. Usual termination. Pathology of non-suppurative periostitis. "Typhoid" periostitis. What bones involved. Usual pathology. Symptoms of periostitis. Diagnosis. Treatment. Of different stages.

SECOND WEEKLY MEETING.

OSTEOMYELITIS.

Acute Suppurative.

Etiology: Age. Preceding diseases. Organisms usually found. Local conditions. Pathologic anatomy. Portion of bone primarily involved. Changes in bone. Symptoms. Modes of onset. Course of disease. Physical signs. Differential diagnosis. Treatment. (a) Acute osteomyelitis, (b) acute epiphysitis, (c) osteomyelitis with suppurative synovitis, (d) osteomyelitis after open wound; treatment of each.

NECROSIS OF BONE.

Etiology: Preceding diseases of bone. Pathologic changes leading to formation of sequestrum. Symptoms. Diagnosis. Treatment. In primary stage. After separation.

CARIES OF BONE.

Etiology: Principal causes. Pathologic anatomy. Differentiate between caries and necrosis. Symptoms. Differentiate symptoms and diagnostic signs. Treatment. In detail.

TUMORS OF BONE.

Demonstrate microscopic sections. In what ways may tumors occur? Primary. Secondary. Exostoses. Forms. Symptoms and treatment of each. Chondroma. Occurrence. Diagnosis and treatment. Osteosarcoma. Pathology, symptoms and treatment. Sarcoma of bone. (a) Spindle-celled, (b) round-celled, (c) myeloid; location, pathology and symptoms. Metastatic malignant bone tumors. Sarcoma, carcinoma, hypernephroma.

THIRD WEEKLY MEETING.

TUBERCULOSIS OF BONE.

Etiology: Tubercle bacillus, culture and identification. Mode of entrance into bone.

Pathologic Anatomy: (a) Acute tuberculosis of bone, (b) limited tuberculous deposits, (c) tuberculous osteomyelitis, (d) tuberculous periostitis.

Symptoms: Clinical history of (a) tuberculous osteomyelitis, (b) tuberculous disease of epiphysis or diaphysis.

Treatment: Diagnosis and treatment of tuberculous disease (a) without abscess, (b) with abscess, (c) with sinuses.

SYPHILIS OF BONE.

When may it occur? Probable pathology of secondary stage.

Symptoms: Clinical history and diagnosis in secondary, tertiary, inherited syphilis.

OSTEOMALACIA.

Pathology. Clinical significance.

RICKETS.

Theories of causation. Pathologic changes.

Symptoms: Clinical history. Physical signs.

Treatment: Medicinal. Surgical importance of rickets.

FOURTH WEEKLY MEETING.

FRACTURES.

Varieties.

(a) Describe stellate, comminuted, multiple, punctured, gunshot, transverse and oblique fractures.

(b) Complete, incomplete, greenstick, depressed, fissured fracture.

(c) As to displacement of fragments, depressed, with over-riding, transverse, rotary, angular and longitudinal displacement. Impacted fracture.

(d) Simple, compound and complicated fracture.

(e) Differentiate traumatic and pathologic fractures.

Etiology: Predisposing and exciting causes. Mechanism of each.

Symptoms: Immediate symptoms, local and general. Mediate symptoms, local and general.

Diagnosis: Diagnose a fracture, describing methods of examination.

Treatment: Principles in treatment.

FIFTH WEEKLY MEETING.

FRACTURES OF NECK OF FEMUR.

Pathology: At small part of neck. Infracture or incomplete fracture, portion of neck, displacement, impaction. Complete, subcapital fracture, lines of fracture, displacement, impaction, deformity. At base of neck, usually mixed, lines of fracture, impaction, displacement, rotation.

Symptoms: Pain, loss of function. Swelling, obliterated inguinal fold, ecchymosis. Outward rotation, causes and degree. Shortening, causes and degree. Muscular relaxation. False motion, spreading of trochanter.

Diagnosis: (1) Age, (2) sex, (3) force, (4) shortening, (5) crepitus, (6) eversion, (7) expansion of trochanter, (8) swelling, ecchymosis and tenderness.

POTT'S FRACTURE.

Pathology: Fracture of inner malleolus, outer lower edge of tibia, fibula, laceration of internal lateral ligament, eversion of foot.

Prognosis: Age, compound fracture, delayed union and non-union, edema, pain.

Treatment: Immediate dressing, plaster or gutter.

COLLES' FRACTURE.

Pathology: Usual line of fracture, anterior ligament, backward displacement, impaction and crushing, stripping of periosteum, radio-ulnar ligaments styloid of ulna. Injury to ligaments, synovial sacs, tendon sheaths.

Prognosis: Influence of age, peri-articular adhesions, reposition, condition of lower fragment, plane of articular surface.

Treatment: Accurate reduction, obstacles to overcome, method. Form of compress and splint required.

SIXTH MONTH.

DISEASES OF BLOOD AND DUCTLESS GLANDS.

First Weekly Meeting.

Anatomy of Blood

Physiology of Blood.....

Physiology of Spleen, Lymph Glands and

Bone Marrow.....

Second Weekly Meeting.

Secondary Anemia: Etiology and Microscopic Changes

Chlorosis: Etiology, Symptoms and Microscopic Changes

Pernicious Anemia: Pathologic Anatomy, Symptoms and Blood Changes

Third Weekly Meeting.

Splenomedullary Leukemia: Symptoms, Blood Changes and Treatment

Lymphatic Leukemia: Pathologic Anatomy and Diagnosis

Fourth Weekly Meeting.

Hodgkin's Disease: Pathologic Anatomy and Symptoms

Pathology and Diagnosis of Addison's Disease

Monthly Meeting.

The Therapeutic Action of Iron

Treatment of Pernicious Anemia

The Value and Limitations of Blood Examinations

FIRST WEEKLY MEETING.

ANATOMY OF THE BLOOD.

Origin, Structure, Corpuscles and Plasma.

Plasma: Corpuscles—Red and white.

Red: Size, shape, number and structure.

White: Lymphocytes and leucocytes.

Lymphocytes: Granules, ameboid movement. (a) Transition forms. Nucleus, cytoplasm, staining, number. (b) Polynuclear. Nucleus granules, staining, number. Eosinophiles. (c) Mast cells. Nucleus, granules, staining.

PHYSIOLOGY OF THE BLOOD.

Blood plasma blood serum and defibrinated blood. Reaction of blood, cause, method of determination. Specific gravity, method of determination, variations, causes.

Red Corpuscles: Structure. Stroma. Hemoglobin, form in corpuscle, percentage of corpuscle. Globin, hematin, hemochromogen. Combination of hemoglobin with gases. Origin of red corpuscles, changes in bone marrow. Destruction of red corpuscles, facts for and against spleen, probable site.

White Corpuscles: Origin of leucocytes and of lymphocytes. Normal number, physiological leucocytosis. Functions of leucocytes: (1) phagocytosis, (2) aid in absorption of fats and peptones, (3) aid in coagulation of blood, (4) help supply proteids of blood plasma.

Blood Plates: Size, shape, possible functions.

Blood Plasma: Chemical composition, proteids, extractives, salts, enzymes. Coagulation of blood. (1) Fibrinogen, (2) prothrombin, (3) calcium salts, (4) thrombin, (5) fibrin.

PHYSIOLOGY OF THE SPLEEN.

Histologic structure of spleen. Rhythmic contractions. Theories of function: (1) formation of red corpuscles, (2) destruction of red corpuscles, (3) production of uric acid, (4) production of enzyme.

PHYSIOLOGY OF BONE MARROW.

Histologic structure of red marrow. Nucleated corpuscles, non-nucleated cells. Changes in marrow after hemorrhage.

PHYSIOLOGY OF LYMPH GLAND.

Histologic structure. Origin of lymphocytes.

SECOND WEEKLY MEETING.

SECONDARY ANEMIA.

Etiology: (a) Hemorrhage. Many causes. Rate and amount of hemorrhage. Age and sex. Recovery, elements restored. (b) Inanition. Lack of quantity or quality of food. Local causes. Elements reduced. (c) Excessive albuminous discharges. Chronic nephritis, prolonged suppuration, lactation, etc. (d) Toxic agents. Organic or inorganic poisons. Metallic poisons, course, elements involved. Acute and chronic infections. Pyrexia.

Microscopic Changes: Red corpuscles, oligocythemia, changes in shape and color, staining reactions, nucleated cells. Reduction and distribution of hemoglobin. Changes in white cells, increase and reduction. Reduction in blood plasma.

CHLOROSIS.

Etiology: Age and sex. Heredity. Unhygienic surroundings. Copremia. Emotions.

Symptoms: Onset, complexion, respiratory and circulatory disturbances, digestive disorders.

Microscopic Changes: Oligocythemia moderate, oligochromemia marked. Size, shape and irregularities of red cells. Leucocytes.

PERNICIOUS ANEMIA.

Pathologic Anatomy: Skin and subcutaneous fat. Heart, blood vessels and hemorrhages. Liver, spleen, lymph glands. General fatty degeneration, deposits of iron pigment. Changes in bone marrow.

Symptoms: Insidious onset, general symptoms, respiratory and circulatory disturbances, gastrointestinal symptoms.

Blood Examination: Marked oligocythemia, color index, macrocytes, microcytes, poikilocytes, normoblasts, megaloblasts.

Leucopenia. Changes in white cells. Blood plates.

THIRD WEEKLY MEETING.

SPLENOMEDULLARY LEUKEMIA.

Symptoms: Insidious onset, early symptoms, hemorrhages. enlarging spleen, circulatory symptoms, nervous symptoms.

Blood Changes: Number of white cells. Ratio of reds. Myelocytes, eosinophiles, "polymorphous blood." Number of red cells, nucleated forms.

Treatment: Roentgen ray. Exposures (length and location). Immediate and remote results. Hygienic treatment. Internal treatment. Arsenic, physiologic and therapeutic actions. Bone marrow preparations.

LYMPHATIC LEUKEMIA.

Pathologic Anatomy: Glands usually involved, physical appearances, microscopic changes. Lymphoid structures usually involved. Changes in liver, leukemic nodules. Changes in kidneys. General distribution of leukemic nodules.

Diagnosis: Clinical history, arrangement of enlarged glands. Blood changes. Lymphocytes, other forms of whites. Reds, number, nucleated.

FOURTH WEEKLY MEETING.

PSEUDOLEUKEMIA.

Pathologic Anatomy: Lymph glands. Chains

usually involved, gross appearances, size, density, periadenitis, infiltration. Microscopic changes, lymphadenoma.

Spleen: Microscopic changes. General distribution of lymphomata. Changes in bone marrow and liver.

Symptoms: Enlarged glands, location and rate of growth. General symptoms of anemia. Hemorrhages. "Chronic relapsing fever." Mechanical effects. Circulatory and nervous symptoms. Gastrointestinal disturbances. Cutaneous symptoms. Blood changes.

ADDISON'S DISEASE.

Pathology: Usual lesion of suprarenal bodies, gross and microscopic. Other morbid changes occasionally found. Abdominal sympathetic, changes in cells and fibers. Deposit of pigment.

Diagnosis: (1) Pigmentation of skin and mucous membranes, (2) anemia, (3) asthenia, (4) feeble heart's action, (5) gastric disorders.

Differentiate from pigmentation of: (1) abdominal growths, (2) hepatic disease, (3) pregnancy, (4) "vagabond's disease," (5) melanotic sarcoma, (6) exophthalmic goiter, (7) syphilitic discoloration.

Book Reviews

PRINCIPLES AND PRACTICE OF MODERN OTOL-
OGY. By John F. Barnhill, M. D., Professor of
Otology, Laryngology and Rhinology, Indiana
University School of Medicine; Otologist,
Laryngologist State College Hospital, etc., and
Ernest de Wolfe Wales, B. S., M. D., Associate
Professor of Otology, Laryngology and Rhin-
ology, Indiana University School of Medicine,
formerly assistant in Otology Harvard Medical
School; formerly assistant Aurist and Oculist
Massachusetts Charitable Eye and Ear Infirm-
ary, etc. 305 illustrations, many in colors. W.
B. Saunders Co., Philadelphia.

This work has been carefully reviewed and we can unhesitatingly say that to our minds there is no other book printed on the subject of Otology that surpasses Barnhill and Wales. It is clear and concise; well written; splendidly printed and elegantly bound. The size of the

work is sufficiently large to insure completeness and thorough elucidation; yet it is easily handled; not too large, nor too small; every subject exhaustively treated by these two masters. One thing that strikes the reader very forcibly, in addition to being strictly up to date, is that it gives the kernel of the subject at once, and at a glance, without wading through an ocean of matter to get at a point. We are glad that Barnhill and Wales have given the profession this work.—C. C. S.

SURGERY: ITS PRINCIPLES AND PRACTICE. By various authors, edited by William Williams Keen, M. D. LL.D., Professor of Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia. Volume 3. W. B. Saunders, Philadelphia.

We have had occasion to review Keen's work before, having received Volumes 1 and 2. Volume 3 has not disappointed us. In appearance as well as contents it is par excellence. The masters who have written this work are the leaders of medical thought of the world. Had Keen to make over the selection of his associates in this undertaking, we doubt whether he could have chosen better. There is no doubt but what Keen's work will be standard for many years to come. Without going into thorough detail of the subjects and by whom treated, we can safely say that money put into Keen's will be well spent and a standard work obtained; in fact, there is none better.—C. C. S.

ATLAS AND TEXT BOOK OF HUMAN ANATOMY. By Dr. Johannes Sobotta, Professor of Anatomy in the University of Wurzburg, with additions by J. Playfair McMurrich, A. M., Ph. D., Professor of Anatomy in the University of Toronto, formerly professor of Anatomy in the University of Michigan. Volume 3 treats of the Vascular, Lymphatic System, the Nervous System and the Sense Organs. W. B. Saunders Co., Philadelphia.

The plates in this work are without exception, the most beautiful we have ever seen. We feel no hesitancy in pronouncing Sobotta and McMurrich without a peer; in fact, it is artistic, the cuts being as nearly true to life as human ingenuity and the printer's art can devise.

The colors are exceptionally brilliant and beautiful. The study of Sobotta and McMurrich is more like reading an interesting novel than picking your way laboriously through a text book. This is more vividly brought to mind when contrasted with the dry, old-style anatomies that we used to ponder over in our student days.—C. C. S.

QUESTIONS ASKED ON EXAMINATION.

MATERIA MEDICA AND THERAPEUTICS.

Dr. F. T. Murphy, Brinkley.

Name a few of the conditions which modify the action of medicine.

Define expectorant. Name two (2) kinds and give an example of each.

Name two (2) cathartics and describe action of each.

Name the most powerful hydragogue cathartic. State dose and in what conditions is it chiefly used?

Explain the constipating action of opium.

State the pathological condition for the relief of which diuretics are administered.

As a diuretic, why is the infusion preferable to other preparations of digitalis?

What dangers attend the administration of the phenols?

Name two (2) principal contraindications for general anesthesia.

Would you hesitate to use calomel with common chlorides? If so, why?

PRACTICE OF MEDICINE.

Dr. M. L. Norwood, Lockesburg, Ark.

Give diagnosis and treatment of angina pectoris.

Give diagnosis and treatment of apoplexy.

Give symptoms and treatment of chlorosis.

Give diagnosis and treatment of dysentery.

Give symptoms and treatment of epilepsy.

Give diagnosis and treatment of erysipelas.

Describe algid form and give treatment of malaria.

How would you treat hemorrhage of typhoid fever?

Define metastatic pneumonia, give symptoms and treatment.

Differentiate hydrophobia from pseudo-hydrophobia.

OBSTETRICS.

Dr. M. Fink, Helena, Ark.

What is labor? Give the stages into which it is divided. Give the best method of delivery of the placenta.

Define presentation and position.

How would you manage a posterior shoulder presentation?

Give cause, prognosis and treatment of pernicious vomiting of pregnancy.

How would you diagnose and conduct the delivery of a hydrocephalic foetus?

What treatment would you adopt in a case of umbilical hernia in an infant?

What is pregnancy? What is fecundation?

What changes take place in the ovum after fecundation?

In case of hemorrhage of third stage of labor, what is the necessary treatment?

What would you do in case of rupture of uterus in the first stage of labor?

Describe asphyxia neonatorum. How it is prevented? Give your method of resuscitation.

CHEMISTRY.

Dr. J. C. Wallis, Arkadelphia, Ark.

What is hydrogen, its properties and how prepared?

What is hydrogen monoxide?

What is hydrogen dioxide?

What causes effervescence when hydrogen dioxide is mixed with pus?

Define the terms hard and soft water?

Give the best methods of purifying water.

What is salol and how prepared?

What is adrenalin and for what used?

What is chloral hydrate and its physiological antidotes?

Give treatment of poisoning from Paris green.

PHYSIOLOGY.

Dr. G. V. Poyner, Green Forest.

Describe the digestion (and what becomes) of the fats, proteids and carbohydrates.

Give origin, form, size, number and function of red corpuscles.

Describe normal pulmonary sounds.

How is lymph formed and what is its function?

What is the function of the bile?

What are the functions of the skin?

What are peptones?

Give the function of the retina, choroid and cornea.

Give the function of the fifth pair of cranial nerves.

What is the function of the cerebellum?

ANATOMY.

Dr. McCammon, Arkansas City.

Describe the inferior maxillary bone.

Name the ligaments of the knee joint.

Describe fully the gluteus maximus muscle.

Describe fully the internal pterygoid muscle.

Describe fully the common carotid artery.

Describe the thyroid gland.

Describe fully the third pair of cranial nerves.

Name and locate the salivary glands.

Describe fully the ovary.

Give the blood supply of the uterus.

SURGERY.

G. S. Brown, M. D., Conway.

Define surgical diseases; give an example with treatment for same.

What is ulceration? By what processes is ulceration healed?

Differentiate between asepsis and antisepsis.

What pathological changes of structure make it necessary for amputation of a diseased or injured member?

What is varicocele? Describe radical operation for varicocele.

Give symptoms of acute appendicitis, before and after rupture, and treatment of same.

Define a fracture. Differentiate between a compound fracture and a comminuted fracture.

Describe an operation for the radical cure of hallux valgus.

Give causes and treatment of post operative phlebitis.

Give the causes, symptoms and treatment of pyosalpinx.

**PROGRAM
OF THE
THE THIRTY-SECOND ANNUAL MEETING
OF THE
ARKANSAS MEDICAL SOCIETY.**

First Day—Tuesday, May 12th.

First Meeting of the House of Delegates
Morning Session, 9 o'clock
Calling the meeting to order.
Invocation by Rabbi Louis Witt, Little Rock.
Announcement of Committees by the President.
Introduction of business requiring immediate attention.
Report of Committee on Arrangements, F. Vinsonhaler, Chairman, Little Rock.
Report of Committee on Scientific Work, S. S. Stewart, Chairman, Little Rock.
Report of Committee on Public Policy and Legislation, O. H. Williamson, Chairman, Marianna.
Report of Chairman of the Council, J. S. Westersfield, Conway.
Report of Board of Visitors, Medical Department, University of Arkansas, Little Rock, M. Y. Pope, Chairman, Monticello.
Selection of Nominating Committee.
Miscellaneous business.
Adjournment to 2:30 o'clock.

First Day—Tuesday, May 12th

Second Meeting of the House of Delegates
Afternoon Session, 2:30 o'clock
Announcements.
Report of Treasurer.
Report of Secretary.
Reports of Committees.
Unfinished business.
New business.
Adjournment.

Second Day—Wednesday, May 13th

First General Meeting
Morning Session, 10 o'clock.
Calling the meeting to order.
Invocation by Rev. John T. Christian, D. D., Little Rock.
Address of Welcome, by Hon. J. H. Hollis, Mayor of Little Rock.
Address of Welcome, Dr. J. R. Dibrell, President Pulaski County Medical Society.
Response to the Addresses of Welcome, by Sam E. Thompson, El Dorado.
Annual Address by the President, C. C. Stephenson, Little Rock.
Referring of addresses.
Report of the Committee on Arrangements.

New business.
Adjournment.

Second Day—Wednesday May 13th

Second General Meeting
Afternoon Session, 2:30 o'clock
Calling the meeting to order.
Reports.
Unfinished business.
New business.
Adjournment.

**SECTION ON STATE MEDICINE AND PUBLIC
HYGIENE**

Chairman's Address—
J. P. Sheppard, Little Rock.
The State Board—
M. Fink, Helena.
Public Health and Vital Statistics—
G. M. D. Cantrell, Little Rock.
The Necessity of a State Sanatorium for the Treatment of Tuberculosis—
C. E. Witt, Little Rock.
Hygiene in Tuberculosis—
C. H. Hoffman, Little Rock.

SECTION ON DISEASES OF CHILDREN

Chairman's Address—
H. P. Routh, Hackett.
Modification of Breast Milk—
J. Ross Snyder, Birmingham, Ala.
Infant Feeding—
A. G. Lee, Texarkana.

**SECTION ON DERMATOLOGY AND SYPHIL-
OLOGY.**

Chairman's Address—
A. U. Williams, Hot Springs.
Skin Lesions as Danger Signals—
Nettie Klein, Texarkana.

Third Day—Thursday, May 14th

Second General Meeting
Morning Session, 9 o'clock
**PROGRAM OF THE SECTION ON GYNE-
COLOGY AND OBSTETRICS**
Chairman's Address—
C. P. Meriwether, Little Rock.
Diagnosis of Pelvic Diseases of Uterus, Tubes, Ovaries and Complications—
Joseph Price, Philadelphia, Pa.
Calcified Fibroma of the Ovary—
Anderson Watkins, Little Rock.
Abdominal Ectopic Pregnancy of Seventeen Months Duration: Operation—
R. C. Dorr, Batesville.
Abdominal Pregnancy: Report of a Case—
A. G. Dickson, Paragould.

Hematometra and Hematocolpos: Operation—

L. E. Willis, Newport.

The Necessity of Considering Carefully Any Diseased Conditions of the Reproductive Organs of the Female, and What it Means to the Health of Women and Increase of Population—

C. S. Pettus, El Dorado.

Immediate Repair and After Management of Lacerations of the Female Perineum—

W. A. Snodgrass, Little Rock.

A Few Points on the Management of Labor—

C. K. Caruthers, Pine Bluff.

Surgical Treatment of Retroflexions: Report of Cases—

Wm. H. Miller, Little Rock.

Puerperal Eclampsia, With Report of Two Unusual Cases—

C. M. Lutterloh, Jonesboro.

Some Rare Cases in Obstetrics—

H. C. Dunavant, Osceola.

Puerperal Infection—

G. A. Warren, Black Rock.

Third Day—Thursday, May 14th

Second General Meeting

Afternoon Session, 2 o'clock

SECTION ON SURGERY

Chairman's Address—

A. G. Dickson, Paragould.

Tuberculosis of the Bone—

J. P. Runyan, Little Rock.

Intestinal Obstruction—

W. A. Snodgrass, Little Rock.

Surgical Drainage—

C. R. Shinault, Little Rock.

Appendicostomy in the Treatment of Amebic Dysentery—

Oscar Gray, Little Rock.

The Preparation of Patients for Surgical Operations: Report of Cases—

Arthur E. Sweatland, Little Rock.

Rupture of the Heart: Report of a Case—

M. C. Hughey, Knobel.

Reports of Some Surgical Cases—

J. C. Hughes, Walnut Ridge.

Sarcoma of the Kidney—

Carle E. Bentley and M. D. Ogden.

Report of a Unique Case of Appendicitis—

Lawrence Hill, Greenway.

Fourth Day—Friday, May 15th

Third Meeting of the House of Delegates

Morning Session, 9 o'clock

Report of Special Committees.

Report of Nominating Committee.

Election of Officers.

Election of Delegates and Alternates to the American Medical Association.

Miscellaneous business.

Unfinished business.

New business.

Adjournment.

Third General Meeting

Morning Session, 10 o'clock

SECTION ON PRACTICE OF MEDICINE

Chairman's Address: Getting Practice—

H. Thibault, Scotts.

The Use and Abuse of Digitalis and Its Alkaloids as Heart Tonics—

Thomas Hunt Stucky, Louisville, Ky.

Significance of Urinalysis in Nephritis—

N. S. Davis, Chicago, Ill.

Rheumatism—

M. G. Thompson, Hot Springs.

Arthritis Deformans—

Allen Cox, Helena.

Intussusception—

St. Cloud Cooper, Fort Smith.

Pneumonia, Causation and Treatment—

W. H. Grady, Monette.

Progressive or Migratory Pneumonia—

J. M. Stevens, Clover Bend.

Pneumonia—

John W. Melton, Alum.

Treatment of Pneumonia—

H. H. Niehuss, Wesson.

Treatment of Pneumonia—

F. E. Harrison, Fordyce.

Acute Catarrhal Bronchitis—

J. A. Robertson, Hot Springs.

Adiposalgia—

O. M. Bourland, Van Buren.

Ileo-Colitis—

Olive Wilson, Paragould.

Fourth Day—Friday, May 15th

Third General Meeting

Afternoon Session, 2:30 o'clock

Hydrophobia: Report of Cases—

J. S. Rhinehart, Camden.

Intestinal Antiseptics—

T. E. Rhine, Thornton.

Sciatica—

G. E. Cannon, Magnolia.

Continued Malarial Fever—

C. D. Stevens, Magnolia.

Malarial Hematuria—

J. G. Waldrop, Augusta.

Examination of the Eyes and Ears of School Children—

R. H. T. Mann, Texarkana.

Measles: A Report of 140 Cases—

A. L. Carmichael, Little Rock.

Influences of the Child in Utero on Malarial Infection—

Preston Hunt, Texarkana.

Pulmonary Tuberculosis: Report of Cases—

D. C. Walt, Little Rock.

Obstipation: Is it a Disease or Symptom?—

O. C. Howton, Osceola.

Sporadic Cases of Diphtheria—

C. C. Price, Douglass.

Unreliability of Murmurs—

N. S. Word, Camden.

Gastric Ulcer as a Complication in Typhoid Fever—

J. F. Brown, Conway.

The Degenerate in Society vs. Race Suicide—

H. C. Stinson, Little Rock.

(Title of Paper Not Supplied)—

F. B. Young, Springdale.

(Title of Paper Not Supplied)—

Keating Bauduy, Little Rock.

Medical Organization: Its Interests and Results—

T. G. Brewer, Osceola.

Reminiscences of the Civil War—

L. J. Wilson, Alma.

ANNOUNCEMENT FOR LADIES

Wednesday, 9:00 a. m.—Registration and Distribution of Badges.

Wednesday, 2:30 p. m.—Pink Tea at Country Club.

Cars leave the Marion Hotel at 2:30.

Wednesday Night—Dance at the Insane Asylum.

Highland Park cars leave Fifth and Main every fifteen minutes. Assemble at Marion Hotel.

Thursday, 10:00 a. m.—Card Party at Marion Hotel—Druggists' wives, complimentary to doctors' wives.

Thursday Night—Reception and Dance at Marion Hotel.

Friday Afternoon—Automobile ride. Assemble at Marion Hotel, 3:30 p. m.

Friday Night—Theatre Party at Majestic Theatre, 8:30 p. m.

ANNOUNCEMENT FOR MEMBERS.

There will be a Complimentary Ball given by the citizens of Little Rock, under the auspices of the Board of Trade, at the Hotel Marion, Thursday evening, May 14th, at 9:30. No tickets.

There will be a Complimentary Banquet given by the citizens of Little Rock, under the auspices of the Board of Trade, to the visiting delegates and members of the Arkansas Medical Society, on Friday evening, May 15th, at 9:30. Those desiring to attend must apply to the secretary for tickets. Tickets are non-transferable.

Reyburn will take a picture of the Society immediately after adjournment of General Session, Wednesday at noon.

PROPOSED AMENDMENTS TO THE BY-LAWS OF THE ARKANSAS MEDICAL SOCIETY

At the last annual session the following amendments were introduced, and under the law, will come up for adoption at the coming session, to be held May 12-15.

To Amend Chap. IX., Sec. V. of the By-Laws.

Dr. Jelk's Amendment:

Section 3. The deliberations of this Society shall be governed by parliamentary usage as contained in Robert's Rules of Order, when not in conflict with this Constitution and By-Laws.

Sec. 4. The principles of Medical Ethics promulgated by the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

Dr. Young's Amendment:

Nongraduates who possess all the other qualifications of membership may be admitted to associate membership in county societies. Such members shall not be entitled to vote, to hold office, or to become members of the State Society, but shall be entitled to all other rights and privileges of membership in county societies.

RESOLUTIONS TO EXPUNGE CHAP. V., SEC. IV. OF BY-LAWS.

"Whereas, Some of the members of the Arkansas Medical Society believe that an injustice may be done both to this Society by Chapter V, Section VI of the By-Laws, and,

"Whereas, We believe that too many restrictions on the free action of this Society are wrong; therefore, be it

"Resolved, That Chapter V, Section IV., be expunged from the By-Laws of this Society."

OFFICERS OF THE AMERICAN MEDICAL ASSOCIATION, 1907-1908

Next Annual Session, Chicago, Ill., June, 1908.

President—Joseph D. Bryant, New York, N. Y.

President-Elect—Herbert L. Burrell, Boston, Mass.

First Vice-President—Edwin Walker, Evansville, Ind.

Second Vice-President—Hiram L. Burton, Lewes, Del.

Third Vice-President—George W. Crille, Cleveland, O.

Fourth Vice-President—W. Blair Stewart, Atlantic City, N. J.

General Secretary—Geo. H. Simmons, 103 Dearborn Ave., Chicago.

Treasurer—Frank Billings, Chicago.

Board of Trustees—E. E. Montgomery, Vice-Chairman, Philadelphia, 1908; A. L. Wright, Carroll, Iowa, 1908; H. L. E. Johnson, Washington, D. C., 1908; William H. Welch, Baltimore, 1909; Miles F. Porter, Ft. Wayne, Ind., 1909; M. L. Harris, Secretary, Chicago, 1909; T. J. Happel, Chairman, Trenton, Tenn., 1910; W. W. Grant, Denver, Colo., 1910; Philip Marvel, Atlantic City, N. J., 1910.

Judicial Council—C. E. Cantrell, Chairman, Greer, ville, Texas; R. C. Cabot, Boston; G. W. Guthrie, Wilkes-Barre, Pa.; Thos. McDavitt, St. Paul, Minn.; Chas. J. Kipp, Newark, N. J.

Council on Medical Education—Arthur D. Bevan, Chairman, Chicago; W. T. Councilman, Boston; James W. Holland, Philadelphia; Victor C. Vaughan, Ann Arbor, Mich.; J. A. Witherspoon, Nashville, Tenn.

Council on Pharmacy and Chemistry—George H. Simmons, Chairman, Chicago; C. Lewis Diehl, Louisville, Ky.; C. S. N. Hallberg, Chicago; R. A. Hatcher, New York City; Reid Hunt, Washington D. C.; L. F. Kebler, Washington, D. C.; J. H. Long, Chicago; F. G. Novy, Ann Arbor, Mich.; W. A. Puckner, Secretary, Chicago; S. P. Sadler, Philadelphia; J. O. Schlotterbeck, Ann Arbor, Mich.; Torald Sollmann, Cleveland; Julius Steiglitz, Chicago; M. I. Wilbert, Philadelphia; H. W. Wiley, Washington, D. C.

Bureau of Medical Legislation—Charles A. L. Reed, Chairman, Cincinnati; W. L. Rodman, Philadelphia; C. S. Bacon, Chicago.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY, 1907-1908

Next Annual Meeting, Little Rock, May 13-15, 1908.

President—C. C. Stephenson, Little Rock.

First Vice-President—M. Fink, Helena.

Second Vice-President—J. L. Butler, Sheridan.

Third Vice-President—C. D. Stephens, Magnolia.

Treasurer—J. W. Scales, Pine Bluff.

Secretary—Morgan Smith, Little Rock.

COUNCILORS.

First District—W. E. Hughes, Walnut Ridge.

Second District—J. M. Jelks, Searcy.

Third District—W. H. Deadrick, Marianna.

Fourth District—B. D. Luck, Pine Bluff.

Fifth District—J. T. Henry, Eagle Mills.

Sixth District—R. H. T. Mann, Texarkana.

Seventh District—J. C. Wallace, Arkadelphia.

Eighth District—J. S. Westerfield, Conway.

Ninth District—Sam G. Daniels, Marshall.

Tenth District—C. E. Hurley, Bentonville.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION.

E. K. Williams, Arkadelphia, one year.

Adam Guthrie, Prescott, two years.

First Alternates.

Wm. Crutcher, Pine Bluff, one year.

C. E. Hurley, Bentonville, two years.

Second Alternates.

H. A. Longino, Magnolia, one year.

J. W. Meek, Camden, two years.

OFFICERS OF SECTIONS.

Medicine—H. Thibault, Chairman, Scott; C. J. March, Secretary, Fordyce.

Surgery—A. G. Dickson, Chairman, Paragould; H. H. Rightor, Secretary, Helena.

Obstetrics and Gynecology—C. P. Meriwether, Chairman, Little Rock; W. S. Lindsey, Secretary, DeQueen.

Dermatology and Syphilology—A. W. Williams, Chairman, Hot Springs; A. A. Evans, Secretary, Bethesda.

Pathology—W. S. Stewart, Chairman, Pine Bluff; C. D. Glover, Secretary, Pine Bluff.

State Medicine and Public Hygiene—J. P. Shepard, Chairman, Little Rock; Oscar Gray, Secretary, Little Rock.

Diseases of Children—H. P. Routh, Chairman, Fort Smith; N. S. Word, Secretary, Camden.

COUNCILOR DISTRICTS AND COUNCILORS

1907-8

First Councilor District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph counties. Councilor: J. E. Hughes, Walnut Ridge. Term of office expires 1909.

Second Councilor District—Cleburne, Fulton, Independence, Izard, Jackson, Sharp and White counties. Councilor: J. M. Jelks, Searcy. Term of office expires 1908.

Third Councilor District—Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff counties. Councilor: W. H. Deadrick, Marianna. Term of office expires 1909.

Fourth Councilor District—Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln counties. Councilor: B. D. Luck, Pine Bluff. Term of office expires 1908.

Fifth Councilor District—Calhoun, Columbia, Dallas, Lafayette, Ouachita, and Union counties. Councilor: J. T. Henry, Eagle Mills. Term of office expires 1909.

Sixth Councilor District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier counties. Councilor: R. H. T. Mann, Texarkana. Term of office expires 1908.

Seventh Councilor District—Clark, Garland, Hot Spring, Montgomery, Saline, Scott and Grant counties. Councilor: J. C. Wallis, Arkadelphia. Term of office expires 1909.

Eighth Councilor District—Conway, Johnston, Faulkner, Perry, Pulaski and Yell counties. Councilor: J. S. Westerfield, Conway. Term of office expires 1908.

Ninth Councilor District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren counties. Councilor: Sam G. Daniels, Marshall. Term of office expires 1909.

Tenth Councilor District—Benton, Crawford, Franklin, Logan, Sebastian, Madison and Washington counties. Councilor: C. E. Hurley, Bentonville. Term of office expires 1908.

COMMITTEES 1907-1908

Board of Visitors University of Arkansas, Medical Department—M. Y. Pope, M. D., Monticello; W. N. Yates, M. D., Fayetteville; F. W. Youmans, M. D., Lewisville; H. Moulton, M. D., Fort Smith; A. C. Jordan, M. D., Pine Bluff.

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Vernon MacCammon, M. D., Arkansas City; L. H. Hall, M. D., Pocahontas.
Committee on Scientific Work—S. S. Stewart, M. D., Little Rock; W. A. Snodgrass, M. D., Little Rock; Morgan Smith, M. D., Little Rock.

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Sixth District—Vernon MacCammon, M. D., Arkansas City.
Seventh District—J. W. Meek, M. D., Camden.

OFFICERS OF COMPONENT SOCIETIES

County Society.	President.	Secretary and Address	Members.
Arkansas.....	W. W. Lowe.....	C. E. Park.....DeWitt.....	14
Ashley.....	J. W. Simpson.....	E. M. Scott.....Hamburg.....	15
Baxter.....	J. A. Hlpp.....	J. J. Morrow.....Cotter.....	5
Benton.....	H. E. Thomason.....	C. A. Rice.....Gentry.....	27
Boone.....	F. B. Kirby.....	L. Kirby.....Harrison.....	14
Bradley.....	B. H. Green.....	W. T. Fike.....Warren.....	11
Calhoun.....	D. F. Wilson.....	T. E. Rhine.....Thornton.....	5
Carroll.....	C. A. George.....	Henry Pace.....Eureka Springs.....	16
Chicot.....	M. M. Norton.....	E. P. McGeehee.....Lake Village.....	10
Clay.....	M. C. Hughey.....	N. J. Latimer.....Corning.....	11
Clark.....	W. T. Rowland.....	N. R. Townsend.....Arkadelphia.....	14
Cleveland.....	Chas. Leali.....	J. F. Crump.....Rison.....	15
Columbia.....	C. D. Stevens.....	J. C. Walker.....Emerson.....	11
Conway.....	E. C. Logan.....	G. W. Ringgold.....Morilton.....	14
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Crawford.....	J. D. Youart.....	M. S. Dibrell.....Van Buren.....	8
Dallas.....	C. J. March.....	W. H. Simmons.....Fordyce.....	10
Desha.....	F. L. Duckworth.....	S. D. Wheat.....McGeehee.....	16
Drew.....	W. A. Brown.....	A. S. J. Collins.....Monticello.....	15
Faulkner.....	J. F. Brown.....	J. F. Westerfield.....Conway.....	11
Franklin.....	H. H. Turner.....	Thos. Douglass.....Ozark.....	2
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Hot Springs-Garland.....	D. H. Burton.....	M. F. Mount.....Hot Springs.....	7
Hot Spring.....	E. T. Bramlet.....	E. H. McCray.....Malvern.....	11
Howard-Pike.....	C. W. Wright.....	W. H. Toland.....Mineral Springs.....	9
Independence.....	W. D. Hankins.....	W. B. Lawrence.....Batesville.....	13
Jackson.....	H. O. Walker.....	G. K. Stephens.....Newport.....	24
Jefferson.....	G. M. Duckworth.....	John S. Jenkins.....Pine Bluff.....	18
Johnson.....	W. R. Hunt.....	L. A. Cook.....Clarksville.....	10
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Lawrence.....	J. B. Pringle.....	H. R. McCarroll.....Walnut Ridge.....	13
Lee.....	W. S. Beatty.....	W. H. Deadrick.....Marianna.....	4
Little River.....	W. L. Shirley.....	W. E. Vaughn.....Richmond.....	8
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Lonoke.....	W. S. Turner.....	O. D. Ward.....England.....	14
Logan.....	E. T. Powell.....	J. S. Shibley.....Paris.....	3
Madison.....	W. A. Moore.....	G. D. Counts.....Wesley.....	18
Miller.....	J. R. Dale.....	R. H. T. Mann.....Texarkana.....	22
Mississippi.....	C. C. Stephens.....	T. G. Brewer.....Osceola.....	14
Monroe.....	E. D. McKnight.....	R. L. Saxon.....Holly Grove.....	10
Nevada.....	G. O. Marsh.....	J. S. Chastain.....Prescott.....	18
Ouachita.....	J. W. Meek.....	N. S. Word.....Camden.....	5
Perry.....	M. E. Howard.....	W. S. Blackwell.....Fourche.....	18
Phillips.....	G. E. Penn.....	W. C. King.....Helena.....	9
Pope.....	J. M. Campbell.....	L. Gaddy.....Atkins.....	19
Polk.....	D. W. Bright.....	C. C. Gunnels.....Mena.....	8
Prairie.....	W. W. Hippolite.....	J. R. Lynn.....Hazen.....	68
Pulaski.....	Anderson Watkins.....	Mahlon D. Ogden.....Little Rock.....	19
Randolph.....	P. M. Shaver.....	W. E. Hughes.....Pocahontas.....	13
Saline.....	T. W. Melton.....	Chas. J. Steed.....Hurricane.....	6
Searcy.....	S. G. Daniel.....	J. E. Reece.....Marshall.....	45
Sebastian.....	J. F. Gant.....	W. R. Brooksher.....Fort Smith.....	18
Sevier.....	J. P. McGee.....	W. S. Lindsey.....DeQueen.....	12
Sharp.....		T. J. Woods.....Evening Shade.....	21
St. Francis.....	D. O. Bridgeforth.....	J. C. Strong.....Forrest City.....	16
Union.....	John A. Moore.....	J. B. Wharton.....El Dorado.....	16
Washington.....	D. Christian.....	Jas. R. Southworth.....Fayetteville.....	13
White-Cleburne.....	L. E. Moore.....	J. J. Moncrief.....Beebe.....	20
Woodruff.....	R. G. Patterson.....	T. B. Bradford.....Cotton Plant.....	
Yell.....	M. A. Worsham.....	A. H. McKenzie.....Dardanelle.....	

Total membership972



THE JOURNAL

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VOL. IV.

LITTLE ROCK ARKANSAS, MAY 15, 1908.

NO. 12

Original Articles

THE USE OF LABORATORY METHODS BY THE GENERAL PRACTITIONER.

By Frank B. Young, M. D., Springdale.*

This may strike you as a peculiar title for a paper before this section; but I have become convinced that laboratory methods are altogether too much neglected by the general, or at least, the country practitioner. While our environment is such that we cannot take advantage of many of the finer points of laboratory technic, there is a wide range of usefulness for even the most isolated practitioner. One objection urged is the lack of special training; another, lack of time; a third, expense, and fourth and most important, uncertainty of result.

All these objections are groundless. In the first place, if a physician takes a life in his hands at all, he owes it to that person to expend all the time necessary for a full and complete diagnosis. Again, it really takes very little time for the simple manipulations if your apparatus is conveniently arranged. The lack of special training can be largely overcome by actual specific work at the office. All the modern works on diagnosis and practice lay down full directions for so-called "clinical" work. Some large volumes, in fact, are devoted exclusively to this. While it would be much more satisfactory to have a course of training in a school devoted to this branch, where this is impossible a sufficient working knowledge is easily attained by home study.

The question of cost is easier settled than most think. In the first place, apparatus is much cheaper than it was a few years ago. A fine microscope, all necessary stains and accessories, complete urinalysis outfit, including centrifuge apparatus for examining stomach contents, etc., can be obtained for less than \$125.00. With this apparatus one can examine perfectly, urine, both chemically and microscopically, sputum, blood,

stomach contents, in fact, anything that can be examined by the immediate or staining method under the microscope, or by color reactions chemically.

I have not found it advisable to attempt the more complicated laboratory manipulations, for instance, the making of cultures, or the cutting, staining, and mounting of sections. For cultural and tumor work I always send specimens to a well-equipped pathological laboratory.

Before I go further let me explain that I am not one of those who believe in laboratory methods to the exclusion of a careful physical examination. It is often only by a reasonable combination of the two that a true diagnosis can be reached and a proper line of treatment established. The old idea that the two methods conflict is altogether wrong and has done much to retard the progress of true medicine. Either is as fallible as human judgment, and the one acts as a check or corrective for the other. Personally, I believe it the duty of every physician to so equip his mind and office that he may get the benefit of at least the simpler manipulations, for his patients.

Uncertainty of result may be largely due to improper selection of a specimen; for instance, I have received specimens of sputum consisting wholly of saliva, manifestly no tubercle bacilli are likely to be in that.

Again, urine may have to be obtained under certain given conditions to secure a proper result. And, still again, repeated examinations may have to be made to obtain positive results. A negative result on the first examination is usually evidence neither for nor against. Repeated negative results are usually final evidence.

In this form of examination, as in physical diagnosis, repeated examinations may have to be made. No man can always make a diagnosis the first time he examines his patient. So it is examining that patient's excretions or secretions.

As it is manifestly impossible to cover the whole ground of clinical diagnosis in a paper of this length, I will only call attention to the more

*Read in the Section on Pathology at the Thirty-First Annual Session of the Arkansas Medical Society, held at Little Rock, May, 1907.

important points. Urinalysis is the most important branch of this work for the country practitioner, and is deserving of a paper before every meeting of this Society.

In the routine examination of urine always have a sample from the total twenty-four hours excretion, mixed, the whole quantity measured and amount noted. At times it is necessary to have the urine that has been voided under special circumstances; for instance, in incipient diabetes mellitus, sugar may be present only after a heavy carbohydrate meal; in mild chronic Bright's disease, albumin may be absent in the morning urine and present, even abundant, after a hard day's work. It is necessary to have a knowledge of the total amount for twenty-four hours, as from that fact much can be inferred; and especially is it imperative to know the amount if any quantitative calculations are to be made.

Broadly speaking, the average twenty-four hour amount for a person of average size is 900 to 1500 c.c. (forty to fifty ounces). During sleep the quantity excreted is normally less per hour than when waking; but in some diseases, as in cardiac insufficiency, there is an absolute increase per hour during sleep. An increase in the amount of urine secreted is noted in chronic nephritis, diabetes insipidus, diabetes mellitus, hysteria, neurasthenia, during the use of some waters, and during the administration of alcohol in any form in small quantity, and from the use of many other drugs.

Anuria, or very marked diminution or urinary secretion, usually means acute nephritis, but may be due to water starvation, or the ingestion of drugs irritant to the kidneys.

Color: The color of urine is largely due to the solids held in solution or suspension. A high color may be due to a concentrated urine; and no color, or light, due to too great a watery secretion. Bile salts and blood cause very dark urine, as a rule.

In the routine chemical examination of urine proceed as follows: Determination of reaction; specific gravity; presence or absence of albumin, sugar, bile salts, blood, pus and total urea secretion.

As a full consideration of all these points would demand too much time, I will outline only the points that appeal to me as of greatest importance, and those only very briefly, as they are all well understood. The normal reaction of urine is mildly acid, but in disease it may become either intensely acid or very alkaline. Acidity of urine is increased by increased proteid metabolism, a heavy meat diet, and sometimes in hysteria; it is reduced by a vegetable diet, alkaline salts in large doses, etc. Ammoniacal alkalinity is due to decom-

position of urine and is due to retention of urine, usually accompanied by cystitis.

The determination of the specific gravity tells us more than any other one observation in urinalysis. The normal is 1015 to 1025, and any variation, accompanied by a variation in the total quantity, gives an idea of the range of the excretion. Usually as the total quantity increases the specific gravity is lowered. In diabetes mellitus this is not the case, as the quantity increases, so does the specific gravity. In chronic Bright's disease the quantity increases but the specific gravity remains normal. A fairly good idea of the presence of albumin, sugar, bile—that is, the total solids—is readily obtained by the simple matter of obtaining the specific gravity. To determine the total elimination of the solid matter, per liter, multiply the last two figures of the specific gravity by 2.33. The significance of the presence of albumin and sugar are too well known to need elaboration. When sugar is found the urine should always be tested for acetone, which, if found, denotes approaching coma.

The presence of bile denotes some obstruction of all gall-passages, either cholecystitis, gall-stone, or cancer.

The determination of the total urea secretion is a key to the bodily metabolism, and should always be made.

The diazo and many other tests are to be made under special circumstances. The microscopic examination of urine is to determine the presence and character of casts, pus-cells, spermatozoa, parasites, microorganisms, blood, epithelial cells and crystals. It is one of the simplest of microscopic manipulations, and, with the aid of the centrifuge, can be completed in a very few minutes. This, at times, is the most instructive part of urinalysis; but we cannot go in detail now.

Sputum is to be examined microscopically for tubercle bacilli and the pneumococcus particularly. The secretions from the throat for the Klebs-Loeffler bacillus, the secretions from the urethra and vagina for the gonococci in particular. All these organisms can be found by the immediate or staining method, and can be readily recognized on a cover glass smear. I have been able to pronounce several cases of purulent vaginal and uterine secretions not gonorrheal, when otherwise I would certainly have pronounced them specific. On the other hand, I have found gonococci where I did not expect them. Twice I have found after repeated examinations, an apparently true clap in the urethra without gonococci. In these cases a diagnosis thus made is the only way to a correct treatment and true prognosis. I have found many cases of tuberculosis in which physi-

cal examination failed, and which I diagnosed by examination of the sputum.

The main value of a blood examination lies in the determination of hemoglobin, the count of the corpuscles, both red and white, the widal test, and in this State, the search for the malarial plasmodium. In this work, I am sorry to say, I have had but little experience. However, I have found the malarial plasmodium with very little difficulty.

The examination of stomach contents is mainly to determine the total acidity, the presence or absence of hydrochloric acid, and the presence or absence of lactic acid. HCl is normally present, and its absence with the presence of lactic acid, pathognomonic of gastric cancer. These tests are simple and easily made and should be made much oftener than they are.

Because of extreme offensiveness the examination of feces is much more neglected than it should be. Even a cursory inspection of feces gives much valuable information, not otherwise obtainable. Feces should be examined for bile, fats, mucus, blood, pus, undigested food, tumor fragments, and intestinal parasites and their ova. The contents of cysts are to be examined for anatomical elements, parasites, etc. As my paper has already exceeded the length originally planned for it, I cannot go into detail in this matter. I wish, however, to call attention to the original work in this line reported last year by Drs. S. S. Stewart and Morgan Smith. Also to cases of amebic dysentery in Arkansas and adjoining states, reported by Dr. Jelks, of Memphis. The diagnosis in these cases were verified by the means I am referring to in this paper.

In closing this paper, let me call attention to the vast amount of original investigation open to all. Especially is this true of our fair Southland, and no one is better prepared to deal with these subjects, if we will, than southern general practitioners. This is in addition to the fact that we need this work every day in our practice, for our own good, and as the right of our patients. Furthermore, there is a vast deal to be learned about general biology, and one can most profitably take up something of this kind as a fad, or side issue, in addition to his clinical work.

This paper has been intended only as suggestive, and I have nowhere attempted to go into detail; but I have found most of this work actually practicable in a practice consisting almost altogether of country work, with all the irregularities which that implies. I would further suggest that next year the secretary of this section ask some one especially qualified to read a paper on each of the subjects usually considered under the heading of "Clinical Diagnosis."

DISCUSSION.

Dr. Thibault (Scotts): Dr. Young's paper suggests a great many shortcomings of the average physician in his attempt to make a diagnosis. Too many of us are too easily satisfied in that respect. At the same time where a clinical diagnosis requires great skill, if it is possible, these things ought to be referred to men who make it a life study and who are better qualified than we are. My idea is that we should not depend entirely upon microscopic findings, especially in some cases, as it is exceedingly dangerous—more dangerous than ever when they seem very highly negative, than at any other time. I do not think we should leave a single stone unturned that will throw light on the subject, that it is the duty of every practitioner to develop himself in this respect, realizing what is expected of him, and recognizing the value of laboratory diagnosis. If he is not competent to make all of them himself he should, of course, be qualified to make the ordinary simple tests.

At the same time there is a wide field for laboratory work and no man should neglect to familiarize himself with it as far as possible. He will never regret the time spent nor the study devoted to experimenting in the laboratory, where each follows out his own line of work through his own effort. He can probably learn things in this way that he could not learn in any other way through carefully experimenting in the laboratory in research work. When it comes to diagnosing diseases by laboratory methods it is best not to depend upon the skill of the general practitioner. I am speaking from the standpoint of pathology, rather than expediency. Nowadays, when early recognition of symptoms and conditions are so necessary, every one should be familiar with the Widal reaction; and by its use the general practitioner may possibly arrive at definite conclusions, but he would better not depend entirely upon that, especially if he is going to make it himself. It matters not how simple a condition may seem upon casual examination, the general practitioner ought to cultivate the habit of making a thorough diagnosis of all cases, and he ought not to depend too much upon his own ability.

Dr. Anderson Watkins (Little Rock): I congratulate the doctor upon the excellence of his paper. I would like to cite a case in keeping with his essay, which will illustrate the difficulty encountered in a number of cases in making microscopical examinations for diagnosis. This patient had been treated for some time for typhoid fever by his former physician; there was consolidation at the apex of one of the lungs; there was more or less septic signs

of secondary infection. Widal examination was made by me with negative result; there was absolutely no expectoration; at least I could not get any. After awhile a general breaking down began, and the sputum showed bacilli in large quantities. This will illustrate the fact that the Widal had not been properly made; the physical signs not duly studied, and thus the mistake had occurred.

There is just one thing to be considered in this paper, and that is, we should not lay too much stress on negative results. This point should be brought out: Negative results in examinations simply will not demonstrate the absence of disease absolutely in any particular condition. Careful consideration should be given to every other feature.

Dr. Turck (Chicago): I cannot help but avail myself of this opportunity of emphasizing strongly the necessity for every physician equipping himself with a laboratory outfit. In these days of enlightenment and advancement, it seems to me it would be like living in darkest Africa to attempt to practice medicine without getting a laboratory equipment.

It does not necessarily follow, as the essayist has rightly stated, that one should have a long course of special training. He can get good guide books, and specimens, which will enable him to carry out experiments and investigations successfully, even though he may not have opportunity for obtaining thorough knowledge of clinical diagnosis, such as may be acquired by completing a course in an institution.

Now, let me say something about a man doing his own work. If that person is equipped with the technic and the knowledge and the industry to do meritorious work, how much better diagnostician does he become? When a case is presented to him for treatment, he associates something that ought to be done with what he sees before him, and which he is quite able to accomplish when it is incumbent upon him, and finds it of all the more striking interest when following up the condition. When we are ignorant, we naturally let slip through our hands unnoticed, important things in a case, which are easily detected when one becomes efficient in laboratory technic. Then does he become more careful in his research in every particular case.

Again, there is nothing that trains the mental activity so much as laboratory research; there is nothing that arouses the intellectual faculties, intensifies our zeal and adds a charm to the practice of medicine like laboratory research. How inspiring it is to watch men at work, to hear their conversation! Why, it is an intellectual feast; it is elevating; it has everything in it to occupy and enthuse men and to raise the indi-

vidual above the common empiricist, and gives him a grasp and an insight into thorough diagnosis and its relation to and influence upon the practice of medicine today.

The next point that I want to emphasize, is the necessity that the rank and file should equip themselves for laboratory research. They will find that it effectually shuts off any other class entirely and effectually; it cuts out "mesmerism or Weltmerism," electric healing, etc., in fact, stops them quicker than anything else I know of where attempts are made to foist them upon the public. You will readily see the necessity for equipping yourselves for gaining a thorough knowledge of research laboratory work. Within its realms there is no place for the empirical quack, "water-path," "osteopath," "magnetic healer;" in fact, the whole class of ignoramuses. There is no place for them. They can find no company; they could not associate with members of the medical fraternity, who are worthy the name, if any such there be, who have no knowledge of microscopy and no interest in that class of work. I doubt if any medical society would even entertain an application for membership from such an one; certainly I cannot see how the addition would be in any way desirable or beneficial. Let me again urge, then, that each one of you equip himself with the requisite apparatus, and as early as you can qualify yourselves for complete laboratory work. You need this knowledge to meet the requirements of your every-day practice. You will find it both pleasurable and profitable, and your satisfaction over work well done, will amply repay the time and expense you devote to acquire this knowledge. You owe it to yourself.

Let me illustrate: A short while ago I went to see a practitioner who was very successful in his community. He had a horse that was sick and he called for the veterinarian, who came to examine the horse. He gave him a thorough inspection; examined his mouth; examined the feces and took home some of the urine. He came back in about two hours. He said: "What you ought to do is to feed him some bran." "Now," he said, "I shall have to fix those teeth." After seeing that everything else was satisfactory, he had the lampreys cut, and after that he gave him soft food. Now, his diagnosis of that horse's condition exhibited skill and thoroughness and conscientious regard for detail at every turn. I could not fail to contrast it with my friend's method, which was characterized by great celerity and dispatch. He went inside his office where patients were waiting to see him. They had scarcely sat down in his presence before he had his diagnosis made and was writing a prescription. As soon as he

had a lull, I said to him, "Doctor, do you know that that horse doctor is a much better physician than you are?" I then went on and talked to him freely about his duty in this respect. He had had an outfit given him, but had not used it for years. The result was that he established a laboratory in his kitchen at home, got some books, studied and took a course. I was out in his territory not long ago and found that he had just read a paper before his home society, presenting some figures advocating thoroughness in diagnosis. It was remarkable. I never saw before such a change in the mind of a man; his whole mentality, his whole makeup seemed thoroughly enthused, when he told me just what that little suggestion of mine had done for him.

This paper ought to awaken those who are lethargic on this subject. It ought to arouse every practitioner and convince them that it is their duty to make the very best effort that they can to equip themselves at once. Knowledge is free to every one. There is a vast difference in knowing that a thing can be done and knowing how to do it. He should avail himself of every avenue for increasing his proficiency. There is no hinderance. A man can go just so far anyhow. He will see that it is a move in the right direction. He will note an improvement in his practice. In a short time, gentlemen, there will be such a result that you would hardly believe possible. Then, when such a case comes to his care, as one of the speakers has just mentioned, his knowledge tells him that it is beyond him. He knows then when a case is beyond him, and that is something. Then, he is able to call in a pathologist—a pathologist who is equipped with more perfect technic and wider experience. Now, every one can do a little, and where a man is doing his own work and he finds something beyond his ability, he should know enough to call in some one who can do it—one that is authority in the matter of pathological technic.

I think the paper a very interesting one and full of helpful suggestions. It should prove a stimulus to excite those who are prepared in this respect to equip themselves without further delay. When it is so easy for a man to get the apparatus and books and acquire the necessary knowledge there can be no valid excuse for remaining ignorant and inefficient. You cannot make your diagnosis too carefully or too well. You will gather inspiration after a while. One book will not be sufficient. You will find that more and more information is necessary. There is no telling what you may develop. There is nothing comparable to following out a line of research work nor is there anything else, in my opinion, that will give such fruitful results.

Dr. Canfield: Any general practitioner who

does not equip himself for first-class laboratory work is either ignorant, afraid of general results, or lazy. The plea that is not admitted is ignorance. It is inexcusable. I do not mean that every practitioner, perhaps, can be a thorough pathologist, and be noted for his special skill; but he will no doubt be able to get along passably with a knowledge largely rudimentary. If he be out in the country the probabilities are he would not acquire any marked skill. His practice being limited, it would be some time after investigating one case before the next opportunity presented itself, and his chances for proficiency would be lessened.

Being afraid of the general difficulties, I find very common. A man reads somebody's instructions, for instance—but when he reads that a slight error in discernment may be productive of tremendous consequences and render his examination negative in result; when he takes note of the troublous things he may meet in his practice and his slight occasional successes, he hesitates. The fact is, a great deal of preparatory work may be done at home. Simply to know a thing is interesting.

Then as to the lack of time plea. I know a general practitioner who does his stomach work; does not use much laboratory apparatus, and what he has is generally dirty from neglect. You would not consider him well equipped—two or three pipettes and few graduates constitute about the sum total of some of these so-called laboratories. The labors of the average country practitioner are usually not so arduous as to leave no opportunity for laboratory research. There is generally an abundance of time which might be utilized profitably in this way if he has the inclination and energy.

Not long ago I had a controversy with a practitioner over my condition. I have not succeeded in convincing him that my knowledge was not acquired in college; but it was really based on my knowledge of the case. I had a terrific chill and had to be taken to the hospital in an ambulance. The physician and his assistant both thought my condition was due to malaria and were of the opinion that my kidneys were at fault. A gentleman who was eminently capable was called in who made a smear of my blood and pronounced that there was no malarial plasmodium or leucocytosis. I still was not content, but sent for another specialist instantler. His diagnosis was similar to the other two. I sent for a general practitioner whom I knew was at his desk every day in his office. I had him come up and make some examinations. He was very sure that I was suffering from malaria, for he found malarial plasmodia in abundance and no leucocytosis whatever.

I believe that we should equip ourselves and proceed as other men do, and endeavor to do very careful work, and in making tests we should repeat our examination in about forty-eight hours to verify our previous findings. I have taken it up in my practice and find it a very helpful adjunct. I think we should all qualify ourselves to do some of this work, such as analyzing stomach contents, examination of the blood for malarial plasmodium, urinalysis, etc. I have said there are difficulties to be met and overcome. In malarious districts patients are usually treating themselves with quinine, and this fact may operate to some extent in rendering your findings negative. Watch, then, the conditions, and repeat your tests.

I am firmly of the opinion that examination of the blood for malaria, the Widal reaction, examination of the feces, examination of the stomach contents, examination of the urine should be done, and done intelligently, at the hands of the general practitioner.

Dr. Douglas: The subject of this essay is one of practical importance to those of us who live in country towns. We cannot always get the specimens we need, but we do our very best with the material we have. I am every day becoming more convinced that the urine should be examined in every case that requires treatment at the hands of the general practitioner. It matters not what the nature of the ailment is, urinalysis will nearly always prove an essential feature of diagnosis.

I had a patient once who had been accustomed all her life to drinking large quantities of water and to passing copious discharges of urine. Occasionally she would have an attack of nausea and vomiting; which we usually attributed to some indiscretion in diet. These attacks began to be more frequent—occurring every two or three weeks, and even every week. During all the time she was in this condition, which was for several years, she had been under the care of some very painstaking and conscientious physicians. I do not know why there had been no urinalysis. It occurred to me that it would be well to look into this. I found the quantity of urine voided to be forty-eight ounces in twenty-four hours. I collected all in a large vessel. The examination showed a large amount of albumen; specific gravity 1003 to 1005, and examination of a subsequent discharge showed specific gravity 1010; and for a long time it remained at 1003 to 1005, while the quantity voided reached forty-eight ounces daily.

If we learn nothing more than to smear blood, test urine and examine stomach contents, it will be well worth the effort. I think it would be well if we had more of just such papers as this one. We need to be stirred up, to the end that we become more careful and thorough in diagnosis, and

overcome that inertia so common to us all.

Dr. Grady: I have been in the harness for quite a while and I think this is a very valuable paper. It has been said by a very wise man that the practical place for the practice of medicine was in clinical diagnosis and therapeutics. If the country practitioner is not qualified to make his own diagnosis, and he can afford the time, he should call on some one else to make it for him. If he is qualified, he can make his own diagnosis; then he has his case well in hand from the start.

A man should always make his diagnosis a thorough one. I usually make my diagnosis in each and every case and try to make it as thorough and complete as possible. I was taught by old Professor John T. Hodgkin, in 1882, and I have very seldom ever had occasion to call on any one to make a special diagnosis for me. I not only have a microscopic and urinalysis outfit, but also an X-ray apparatus, which I find very useful in making diagnoses.

Dr. Bauduy (Little Rock): I have listened to the essay and the discussion with a great deal of interest, during the time that I have been present. I believe we should not attach too great importance to the Widal test in reaching any definite conclusions regarding the existence or non-existence of typhoid fever.

While I was major in the Seventh army corps during the Spanish war I at one time had the privilege and responsibility of being in charge of a division. We were constantly having men reported on the sick list; and after the usual "castor oil," we would put them in quarters, and in a few days they would usually report better. However, I noticed a great many cases wherein a very low rate of pulse prevailed—as low as 75 to 80—and they would show fever of 103 and 104. I started in to investigate these cases, being suspicious of typhoid fever. In every case I ordered a careful microscopic examination, especially as to existence or non-existence of Widal reaction. I had reported to me by the microscopist that the clumping was revealed by the Widal test and I would suspect typhoid. These cases I would order to quarters and treat them. Many got well; some would die. Those upon whom we had postmortems, showed no pathological features whatever; many cases of typhoid fever showed no intestinal lesion, and I was at a loss to understand it. On the other hand, I had a few cases in which it would be positively stated to me that there was no Widal reaction. These cases were not amenable to quinine. Many of them died; but the most of them who died under this treatment, I found to be distinctly typhoidal. Comparatively few of the cases I had under treatment showed the Widal. They showed only the cardinal features taught to me in 1883

and 1884, by which to diagnose typhoid fever. From then on I treated them as being largely typhoidal.

Therefore I deem it insistent to make careful clinical investigation before reporting positive diagnosis of typhoid; otherwise we may be misled by the Widal reaction.

I may be displaying my ignorance in making this statement; it may be that my microscopist did not have a good eye; or that my diagnostic pictures were not well portrayed. Now, we had concurrent estimate of the pathological condition, in that frequently we had a diagnosis by a microscopist and also by a pathologist, and I took it for granted that my learned assistants could be relied on to detect typhoid symptoms, and I accepted negative findings as authentic. On the other hand, I had the positive statement from men of standing, that there was no clumping or leucocytosis present.

I submit this to the Society simply that I may be shown wherein I may be wrong. Microscopy has frequently proven to be in error. The microscopist has frequently seen imperfectly, or wrongly; or microscopy is not absolutely positive in its diagnosis. I say with all respect, I submit it to the Society wherein I may be taught better in this respect; wherein I may be enlightened.

In this instance, should we have seen imperfectly or wrongly, it would be unfair to assert that the microscope is not absolutely positive in its diagnosis.

Dr. Ogden (Little Rock): My friend who has just preceded me speaks of unsatisfactory results from laboratory diagnosis. It might be well to consider that a man might be a competent microscopist and yet fail to make a thorough examination. Both Dr. Young and Dr. Turck have referred to the comparative low cost of equipping one's self for laboratory work, estimating it at about \$125. This, however, does not include the entire expense. To be more accurate, the general practitioner should figure in the cost of laboratory material, specimens, etc., and the price of a good microscope. Possessing these and sufficient energy, the general practitioner may be able to make his work, if well directed, more practical, more positive, more accurate and consequently more satisfactory as to results. I believe that with insufficient training in laboratory methods more harm is done than good accomplished. The idea of the general practitioner taking up laboratory work and developing himself along that line is very commendable. I think that every physician ought to be able to use these aids to diagnose intelligently, thereby increasing his proficiency. He should be able to distinguish between things that strongly resemble each, but are really something entirely different. You can get a great deal of information

from books; they can tell you how to differentiate the red and white corpuscles, and platelets. It will require a little bit of skill to show the poikilocytes. Possibly a little more difficult will it be for him to differentiate bits of cotton fibre from casts in the urine; or parasites from foreign matter, and the various things that occur constantly in analyses. Possibly the most difficult and confusing to the beginner is the semblance of ameba to vegetable cells in the feces; they are very much alike. The various parasitic eggs present quite a different array to be reckoned with.

Why not take a course in clinical microscopy? I say that every one should have a microscope, and should learn how to use it.

Dr. Young spoke of examination of the sputum for tubercle bacilli, examination for gonococci, and I believe he spoke of examining for pneumococci. They, the pneumococci, are closely allied to streptococci and few realize how difficult it is to distinguish between the two. He also spoke of the presence of gonococci in vaginal secretions where least expected. Gentlemen, this is a dangerous thing to tamper with. There are so many cocci in there, closely allied and which respond to the same tests, and characterized by the same general outline, that I do not believe it is possible to diagnosis gonorrhea from the vaginal secretions alone.

I asked Dr. W. H. Welch once, "What do you require for the diagnosis of gonorrhea in vaginal secretion?" His reply was, "For the diagnosis of gonorrhea it is not only necessary to demonstrate characteristic staining reaction, but also to confirm the result by culture, and the results of the clinical examination; the staining and the culture must all be taken into consideration in making a diagnosis."

Therefore, I just want to sound a note of warning right here. It might not do very well, if you were deceived by the vaginal secretion as to the presence of gonococci and give positive report of gonorrhea. It might be better to tell them there were cocci in there that closely resembled it; but that you could not positively diagnose it.

Dr. Young: As I said in the beginning of this paper, it was intended merely to be suggestive. I had no intention of bringing in any method, or to take in any recent thing in procedure; but it was merely to call attention to what we can do.

I was reared in a doctor's office where more or less of this sort of work has been done always. It was an accident that brought this matter forcibly to my attention. I was called to a neighboring town and one physician there was relating a case to me and asked my professional opinion. I replied that I would go with him to see the case. The man had chronic Bright's disease. I sug-

gested urinalysis; and we took back with us to his office a specimen of the urine. When we got there we looked all around the place for something with which to make the examination. We had to boil a little in a teaspoon and make an albumin examination. We, of course, dropped in a little nitric acid; but had a poor test. After that time I noticed quite a number of general practitioners, having a large practice, didn't even have a test tube. That struck me as being a very peculiar state of affairs, and it induced me to prepare this paper to present to the Society. For my own part, I am not a pathologist, and make no pretense whatever of being one; but I have found this work to be inspiring and pleasant. There is a great deal that I do for my own satisfaction and pleasure; as I like the work, and for that reason I have given this subject a little more attention than common.

Every now and then we have traveling doctors to come through our community, advertising in the papers as Dr. So-and-So. "General Specialist," and if we are to believe their prospectus, they are possessed of marvelous skill and accomplishments in a medical way. We have all got to be general specialists, and have a certain amount of surgery thrust upon us, and a considerable amount of laboratory work to perform. If we are doing our whole duty to our patients, it seems to me that the greater part of the work that I have outlined in this paper, can be done by any practitioner who will give it a little time and study. Of course, we all realize the difference between true and false findings. What I mean, is that we should do what we can. If we strike something we cannot do, tell them, as we do in important or difficult surgery, to call in some one, who, by reason of his genius, ability and extended information and experience, is better able to cope with the difficulty than we are.

As I stated before, we are called upon to do a certain amount of this work. We do not know when we may have a great many of these cases. If you do not do a certain amount of this work, you are lacking in your duty. We may be of great service to our patients with the work that we do. I do not say that we can do all this work, for I do not believe we can—I am sure that I cannot.

Another thing, a great many pathologists cannot give us much more reliable findings than we can make ourselves. I fully believe that something like 90 per cent of the work presented will prove to be such as is easily within our reach, and which any practitioner can do in his office if he will give a little time and study to the work and equip himself with inexpensive apparatus.

The conditions, of course, are well known, and I referred to them in my paper, especially the

difficulty of uncertain results. Due stress should be given to careful physical examination. Laboratory examinations alone are seldom worth anything to anyone; but taken in conjunction with painstaking, thorough physical examinations, they very frequently show what the trouble is, and make clear the diagnosis. I thank you, gentlemen.

UNCINARIASIS.*

A GENERAL TOPICAL OUTLINE OF THE DISEASE,
WITH REPORT OF ONE HUNDRED CASES.

By Albert G. McGill, M. D., Chidester, Ark.

Synonyms: This disease has been called Anchylostomiasis, Brickmaker's Anemia, Egyptian Chlorosis, Miner's Anemia, Miner's Cachexia, Porto Rican Anemia, St. Gothard's Tunnel Disease, Tropical Chlorosis, Tunnel Anemia, Hookworm Disease, Tunnel Disease and Uncinariasis. Since the disease has been largely studied, we accept Uncinariasis as the technically correct designation.

Definition: Uncinariasis is a specific zooparasitic disease, caused by a worm of the genus *Uncinaria*, which inhabits the small intestine. The disease is characterized by an anemia with the symptoms usually found in extreme anemias; such as dizziness, palpitation, hemic murmurs, colicky pains in the belly, great weakness, emaciation, intestinal derangements as constipation or diarrhea, nausea and edema. Sometimes the stools are brownish, tarry or even bloody.

Zoology of the parasite: The parasite which causes uncinariasis is a worm of the Nematode family Strongylidae subfamily Strongylinae, genus *Uncinaria*, Species *Uncinaria Duodenalis* (Old World Hookworm), and *Uncinaria Americana* (New World Hookworm). We shall devote our study to the *Uncinaria Americana*.

Description of the worm: The distinguishing anatomical character of the genus *uncinaria* is the dorsal curvature of the anterior extremity of the body due to the shortness of the dorsal wall of the buccal capsule, and re-

*Read before the Ouachita County Medical Society, December, 1907.

sulting in bringing the mouth into a dorsal instead of a ventral position. This makes the hook. The genus *uncinaria* contains blood-sucking worms of the worst type. They are about one-half inch in length and about the thickness of a hatpin. They have heavy, sharp teeth with which they pierce the mucous membrane of the intestines of their host. Their esophagus is a very strong muscular structure which serves as a force pump in blood-sucking. *Uncinaria* is found in various animals, such as dogs, foxes, hogs, apes, sheep and cattle. There seems to be a different species for each animal. None of the species from animals affect man, nor has *uncinaria duodenalis* or *uncinaria Americana* been satisfactorily proved to occur in hosts other than man.

Life Cycle of the Parasite Uncinaria Americana: The eggs are laid in the intestinal tract of the patient by the female worms and are discharged in the feces. They will not develop into adult worms in the intestine, but must first pass out of the intestine. Hence, for every adult hookworm present in the bowels a separate germ must have entered the body. A short time after the escaping into the feces—the time varying according to temperature, moisture and position in the feces—each egg develops a minute embryo. Sometimes the eggs of *uncinaria Americana* contain fully developed embryos when deposited by the worm. We have watched the segmentation of eggs in the laboratory from the beginning of segmentation to the fully developed embryo. After remaining outside the body for a variable time these embryos become developed to a stage where they can cause “ground-itch,” or if they accidentally gain entrance into the body from the hands, in food or drink, can develop into adult worms in the intestinal canal. It is estimated that the parasites require four to six weeks to become mature from the time of infection. The source and manner of infection is interesting. The microscopic worms are swallowed in drinking water or food. Persons who handle dirt are apt to get the microscopic worms on their hands, and it is an easy matter to transfer them to the mouth, either directly or with food. Of great importance is the role

of ground-itch. Ground-itch, water-itch, water sores, water-pox is an affection of the skin confined chiefly to the lower extremities. The typical lesions of the affection consist of a primary erythema, followed by papules and vesicles, which latter frequently become pustular. The subjective symptoms are an intense itching and burning. The lesions, after some time dry, crusts form and recovery takes place.

For several years patients with *uncinariasis* frequently gave a history of having had ground-itch at some time. Recently C. Wardell Stiles has shown preparations demonstrating larval hookworms passing through the skin in the ground-itch patches. (See Journal American Medical Association, Chapter 15, October, 1907). Claud A. Smith in 1900 produced ground-itch in a man by applying feces loaded with ova *uncinaria* to the skin. In eight weeks the feces contained ova *uncinariae*. Looss in 1902 infected a man by letting a few drops of infected liquid feces fall upon his arm. In seventy-one days the ova could be found in the feces. Recently Looss has worked out not only the place of infection, the skin, but demonstrated conclusively the route the larvae take to reach the intestinal canal. They pass through the skin, penetrate the veins and probably the lymphatic vessels. They are carried through the veins to the right heart, through the lymphatic vessels and glands and finally the thoracic duct into the vena cava and to the right heart. From the right heart they are carried to the lungs. They are too large to pass through the capillaries. Hence they are stopped in the lungs. They now penetrate the lung tissue and bronchial tubes, then they are coughed up; some are spit out, the others are swallowed, pass through the acid gastric juice to the small intestines, their normal habitat, whence they develop to maturity.

Lambinet has experimented with the larvae *uncinaria* and found that they are not killed by 25 per cent sulphuric acid solution in forty-five minutes, nor by 2 per cent bichloride solution in six hours. Hence we can understand that larvae can pass through the stomach undigested.

Symptoms: The most important symptom is a secondary anemia of almost any degree, and symptoms due thereto. A secondary anemia is said to be a constant symptom. This is not true. *Uncinaria Americana* is a very common disease in this section, yet in many patients the only symptom found will be the ova in the feces and possibly eosinophilia, hemoglobin normal, red cells normal. The normal habitat of the worms is the small intestine, chiefly the jejunum. It has long been considered a bloodsucker. It buries its head in the mucous membrane and like many other blood-sucking parasites puts into the blood a toxin excreted by the buccal glands, which reduces the coagulability of the blood, causes local hyperaemia and systemic intoxication.

They change feeding ground often and leave behind bleeding wounds, which we may suppose, with the coagulability of the blood reduced, continue to bleed for some time. The red blood cells which they swallow pass through them undigested, only the plasma being used. Hence, they waste much blood. A patient may have from one worm to four or five thousand worms. If one drop of blood was wasted per day by each of two thousand worms it would amount to about three ounces daily. This might cause slight anemia in one patient and marked anemia in another, depending upon his bloodsucking ability and also upon the number of parasites. Hosts of *uncinaria* without symptoms or with but slight symptoms, bear children poorly and convalesce slowly from disease.

Hemorrhages in patients affected with *uncinaria* was observed to be difficult to control. Experiments were made and the fact brought out that the coagulability of the blood was below normal—hypinosis—a deficiency in the fibrin factors in the blood.

Patients affected with *uncinariasis* have a pale, sallow complexion, dwarfed development, mental or physical; perverted appetite, chiefly dirt eating, and colicky pains in the belly. We have examined the stools of five dirt eaters and found ova *uncinariae* in each. Treatment of the disease relieved the appetite for dirt. Examination of six young men, un-

dersized—physical dwarfs—showed ova *uncinariae* in the stools of each. One of these was 22 years old, weight 80 pounds, height 5 feet 1 inch, pale, weak, lazy, hemoglobin 40 per cent with 20 per cent polynuclear eosinophilic leukocytes. After two doses of thymol and some iron he gained ten pounds in two weeks.

We have seen ten cases where the patients had chills in spite of all treatment. Examination of stools showed ova *uncinariae*. Thymol and iron with quinine relieved each without a return of the chills.

Formerly persons were supposed to get *uncinariasis* by eating dirt, as dirt eaters were found to have the disease. Now we know that persons with *uncinariasis* eat dirt because they are unconsciously trying to supply nature's demand for iron with which to make more hemoglobin.

Pains in the abdomen are constant in severe cases. They are caused by the worms piercing the mucus membrane of the intestines. In April, 1906, in Bass' ward, New Orleans Charity Hospital, we saw a case worth mentioning. Young man, 23 years old, father, two brothers and one sister had died from the same kind of pains in the abdomen. He was very pale, vomited dark material, stools tarry and had agonizing pains in epigastrium constantly. So desperate was his condition that nothing was done except stimulants were used freely. He died on the second day after his admission. At autopsy was found a perforation of the duodenum, doubtless due to *uncinariasis*. His entire small intestine was lined with *uncinariae*, and at several other points the intestines were almost perforated.

Clinical Diagnosis: *Uncinariasis* may be correctly diagnosed in one way, and in one way only. Namely, by an examination of the feces. Its recognition by this method is, however, exceedingly simple. *Uncinariasis* is a possibility which should be considered in connection with all cases of anemia, especially among children who go barefooted, earth workers, as in miners, brickmakers, canal diggers, farmers, etc. There are two methods of fecal examina-

tion open to us—the microscopic and the gross examinations.

In the microscopic examination of the feces no special technique is necessary in ordinary cases where there is an abundance of eggs. Simply take a small piece of the feces, always from the surface, about the size of the head of a large pin; spread this out in a drop of water on an ordinary microscopic slide and cover the specimen with a cover glass. Examine with any ordinary moderately high power, as Zeiss 8 m m, or, what we use, Bausch and Lomb two-third inch. After the eggs are located they can be studied more closely with a higher power lens. The eggs are 64-72 microns long by 36-40 microns broad. Look carefully, with not too strong illumination, for an elongate oval egg with thin shell and with protoplasm segmenting. The protoplasm of ova uncinariae Americana is segmented in utero and it is said that sometimes the eggs contain fully developed embryos when deposited by the worm. We have never observed the fully developed embryos in fresh feces, though we have frequently kept feces a few hours in warm weather when we would find in each egg a fully developed embryo. The older the feces and the warmer the weather the more advanced will be the segmentation.

The gross examination may be used when it is impracticable to make a microscopic examination. Give a small dose of thymol, follow with salts, and collect all stools passed. Wash the stools thoroughly several times and examine the sediment for worms about one-half inch long and about as thick as a hatpin and with one end curved back to form a hook. If these are found the diagnosis is certain.

Differential Diagnosis of Eggs of Uncinaria Americana from other Feces and which Resemble the Eggs of Uncinaria Americana: (a) *Ascaris Lumbricoides* (Roundworms)—The eggs have a thick gelatinous, mammillated covering and an unsegmented protoplasm; (b) *Oxyuris Vermicularis* (Pin worms; seat worms)—The eggs have an asymmetrical shell, one side being almost straight, they are slightly smaller and the protoplasm segments finely. Ova uncinariae Americana segment in a short-

er time.

(c) *Trichocephalus Dispar* (whip worms)—The eggs have a smooth, thick shell, apparently perforated at each pole, and an unsegmented protoplasm.

The Blood Picture: The hemoglobin is always reduced in cases of sufficient severity to cause any inconvenience to the patient. In my cases it ranged from 35 per cent up. In bad cases there is always a marked reduction in the hemoglobin. Cases have been reported by Ashford and King from Porto Rico where the hemoglobin was as low as 15 per cent.

The red corpuscles are reduced in number and in bad cases show the changes common to all severe secondary anemias. The leucocytes are usually normal in number. The most marked change is eosinophilia, ranging from 10 per cent to 35 per cent. The eosinophilic leucocytes occur normally in the blood from one-half to 2 per cent of the leucocytes. Less than 5 per cent, however, could hardly be called eosinophilia. In the cases in which we made blood examinations the eosinophiles ranged from 7 to 35 per cent. One of the cases where there was 35 percent eosinophiles, the hemoglobin was also 35 per cent, and the patient came for the relief of dyspnoea and severe colicky pains in the epigastric and umbilical regions.

Eosinophilia is an important sign of uncinariasis and therefore a differential leucocytic count should always be made in all cases of anemia. "Polynuclear eosinophilic hyperleucocytosis (eosinophilia) is an essentially pathological phenomenon except in very young children." (*Simon*). It also occurs in leucomyelogenous leukemia (*Ehrlich*), bronchial asthma, scarlatina, measles, skin disease, in helminthiasis, trichinosis, filariasis, gonorrhea, and sometimes in malaria, malignant diseases, and after the administration of certain drugs. Although a very important symptom of uncinariasis, yet the diagnosis cannot be made from it alone, as shown above.

Treatment: Empty the alimentary canal with any purgative. Give 60 grains of powdered thymol divided into two or three doses, two

hours apart. In two or three hours after the last dose give a saline cathartic. Allow no food, alcohol or oil during the course of treatment. Repeat once a week; continue until no ova are found. This requires from one to a dozen courses. Sixty grains of thymol is the adult dose; it may cause a little dizziness, but if not brought into solution by oils, fats or alcohol, is not toxic.

Along with the preliminary purgative we may give some alkali. This dissolves the mucus in the intestine so that it is better cleared out by the purgative. The worms are covered with a thick layer of mucus.

The Egyptian treatment is used by Dr. J. T. Halsey, New Orleans. Give the preliminary purgative to clear out the canal, then give the following:

Ol. Eucalypti, m. xx;

Spts. chloroformi, m. xx;

Ol. ricini, oz. 1-2.

The above is divided into two or three doses and a dose is given every two or three hours, followed by a saline purgative. This mixture is rather agreeable to take and we have found it efficient. It is more easily given to children.

This paper was written not so much as an expose on uncinariasis, but more to direct the attention of the profession to a very widely prevalent disease in this section of the country, and one which the author regards as of great importance. Since May, 1906, we have examined 150 specimens of feces and found 102 of these to contain ova uncinariae. In our practice we found the disease in men, women, boys and girls. Most of the specimens of feces we bought or begged from boys who came to town to trade and who had an anemic appearance. As before stated, we found the disease in some who were normal in appearance and in hemoglobin. On the other hand, we failed to find the disease in all anemics. We feel safe in saying that 80 per cent of the lazy, dull, shiftless, tallow-faced, pot-bellied boys, coupled with ravenous appetites have uncinariasis Americana.

Addresses

ADDRESS DELIVERED TO THE GRADUATING CLASS OF THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF ARKANSAS, LITTLE ROCK, MAY, 1908, BY DR. MORGAN SMITH, LITTLE ROCK.

"The faculty of this college has legally conferred upon you the very honorable degree of Doctor of Medicine, and the ceremonies of this eventful evening are about concluded. It now only remains for me, speaking on behalf of the faculty, first, to extend to you a sincere welcome upon this, your most auspicious entrance into our profession; secondly, to offer you some remarks of adjuration and exhortation, and lastly, to bid you Godspeed upon the journey which you have elected to travel, the end of which will be the measure of your professional lives.

"I wish to assure you that our welcome is not based upon the spirit of that old saying, 'Misery loves company,' nor upon the natural presumption that man in his selfishness is always more than glad to invite his neighbor to share his troubles and tribulations. But the predicate of our welcome finds a true explanation in the recognition in you, by us, of assiduity and diligence, in the prosecution of your studies, and the ambition to attain the topmost rung of the professional ladder. These qualities have incited our admiration, and observing in you what we believe to be the elements of future success, we cannot but expect medicine to be enriched by your acquisitions and contributions, therefore, we thrice welcome you to the medicine sacrifice.

"For nearly one-third of a century we have been annual witnesses of scenes similar to this one, and many classes equally as energetic, competent, hopeful and promising as yours, have come before us and passed on beyond our view. All have contributed something, good or bad, to the history of medicine. Many have acquired merited fame and wealth. Others have found their level and sphere of usefulness in the populous world of mediocrity (God bless this class, for verily they are the chosen of the Lord and will obtain their reward in heaven as they doubtless missed it in this world), while a few have failed to impress their existence upon the lives of their fellow-man and have been lost forever to the profession.

"That each of you will attain the fruition of his hopes and ambitions, is "a consummation devoutly to be wished," but hardly within the range of possibility; for I suspect that at this very moment you have already securely harnessed your wagon to a star. If so, I hasten to assure you that astro-nomic hitching posts are not so secure and satis-

factory as the telephone post in front of the house of an occupant who promptly pays his bills.

"By this remark I do not mean to assert that you should not indulge in the delightful pursuit of chasing ideals, one of the most pleasant pastimes of the student of scientific mind, but only to remind you that you are mortal, most of your patients more so, and at least until you are able to fully comprehend the vastness of your ignorance and the limitations of your medical knowledge, you will remain on the earth with us and assist in unraveling the problems of disease and lessening the mortality of the human race.

Degrees Won By Merit.

"Four four scholastic years we have been daily associated with you as tutors in your search for medical knowledge, and let it be spoken to your credit and for the information of the public, that your election to receive the Degree of Medicine with which you have just been decorated, was free from favoritism and personal influences; and only upon satisfactory evidences of proficiency, predetermined by quizzes, oral and scriptural examinations, were you chosen for this distinguished honor. The responsibility and relations this college feels it owes and bears to the public, is constantly kept in the minds of your professors, and so appreciative are they of the interest the citizens of Arkansas and contiguous states have manifested for the success of this school, that to foist an incompetent man upon them would be to invite a forfeiture of their support and good will.

"But, gentlemen, do not infer from this that, though we now believe you fully competent to skillfully manage the most difficult case, you will remain the safe guardians of public health without taking advantage of the opportunities which from this hour will open up to you. Heretofore you have been students of medicine, now you must become active practitioners, and it is a certainty that unless you carry into your practice and utilize the same scientific methods taught you, and by the mastery of which you have been enabled to arrive at that point in your scholastic career regarded by us as entitling you to graduation, utter failure will mark your life and your labors come to naught.

"We first attempted to teach you a practice that was essentially theoretical, and as you advanced, you had many opportunities to see demonstrated in the hospitals, clinics and laboratories that our theories were essentially practical. Working under the trained eye and in the service of your professor, you were afforded every opportunity to observe the sequence of symptoms and pathological processes, and bringing to your aid the labora-

tory and microscope, you were able to personally trace effects to cause, and apply intelligently, not empirically, therapeutic measures. All this was accomplished under the direct supervision of your directors, and as their methods and technique appeared so clear and logical, no doubt many, if not all, of you became affected with that universal complaint of students, "undergraduate egotism." Happily, knowing its curability, we felt no apprehension but that the first case of croup you were called to attend would be sufficient to restore your mental equilibrium and give you a lesson of inestimable value.

Hardest Work Yet to Come.

"The work you have been required to do, and which you have so efficiently accomplished during the four scholastic years spent in this college, is child's play compared with that which you will have to do should you strive to reach the front ranks of your profession; and the additional work and sacrifice demanded of you in the effort to maintain that position when once attained, will make such a demand upon your energies that only those of you who are well grounded and possess indomitable courage, pluck and pugnacity, can ever hope to successfully withstand the poisoned shafts of professional envy and jealousy directed against those who rise by virtue of their own merits. It is regrettable to admit, but it is truth, that the destruction of one doctor can be traced to the machinations of his brother practitioner; the laity are innocent and not even simple accomplices. So you have before you a life of constant toil and study, but, after all, the only true life, the only life worth living, is the intellectual life.

"To study for study's sake is as senseless as to drink for drink's sake, or to eat for eat's sake. Let there be purpose in your study, and unless your reading opens to your mind new truths or facts hitherto unknown or discovered by you, and which may be put to practical advantage in the prevention, alleviation and cure of disease, profitless and empty will be the time spent in such labor. It were much better to spend the time in critical analysis of your own methods of practice, for after all this is the only way by which progress and growth are obtained.

As to 'Quick Order' Specialists.

"I wish to especially advise you against doing that which too many recent graduates are guilty of, that of immediately rushing off to some post-graduate school, returning in a few weeks with a certificate of attendance in some special branch, and setting up as a specialist. The certificate

prominently displayed in the reception room, hung low so as to make reading easy, may be sufficient to convince the credulous public that the owner possesses exceptional ability and peculiar training, but to doctors who are on the inside, it is but the incipient symptoms of embryonic charlatanism. One of the most lamentable results of this practice is that legitimate medicine is made the vicarious sufferer. Rather do that which common sense endorses as the better way; make the cases observed and treated in your practice, subjects for close postgraduate study. If you will subject each one of your cases, as by all right you should do, to the most exhaustive examination and scientific analysis, apply remedies and measures science and common sense dictate are the best, never overlooking the wonderful power and magic of the *vis medicatrix naturae*, you will after a few years' practice be surprised to know the fund of knowledge with which you have been almost unconsciously equipped.

"Follow these cases through convalescence or to the grave, as the case may be, so that you may have the opportunity of drawing logical deductions from your experience, without which your knowledge will be incomplete and lack that fine scientific value so essential to the higher order of practice.

"The one question above all others that will come up in your mind is, 'Will I succeed?' Whether or not you will succeed depends altogether upon the motives which actuated you to adopt medicine as your profession, or the conception you have of the meaning of success. If by nature you have a highly developed commercial instinct, scientific medicine will, in all probability, receive little, if any, benefit from the alignment, for your labors will be upon a lower plane, and beneficent contact impossible. A doctor with ideals no higher than the dollar will ultimately become the professional miner and sapper. It were more honorable to play the stock markets for gain than to play for profit in the misfortunes and diseases of your fellow-man.

Professional Ethics.

"That the laborer is worthy his hire is no more applicable than to the doctor. The very nature of his profession disarms him from applying ordinary business principles in his practice, and if he should employ the same methods as the merchant or grocer there would immediately follow an increase of human misery, suffering and death as a result. I do not mean to infer that you should not demand and collect fees commensurate with services rendered, for it is a duty you owe to the patient, society in general, yourself and family. To subordinate the truly scientific spirit to a sor-

did commercialism is to set a blister upon the brow of science. By all precedents, if you would become great, it is safe to say that, while penury may not sit on your front steps, great riches will not take up their abode with you. It has been said with much truth that efficiency in the doctor is in inverse ratio to his accumulation of money.

"The success worth striving for and which lies within the reach of those of you who confine your energies and labors within ethical lines, is that which may be won by each of you. That doctor is successful who is thoroughly grounded in the fundamental principles and practices of his profession, of analytical mind, aggressive to almost boldness in emergency, who knows he knows and knows why he knows, a stone wall against temptations, clean and sober in his habits and life, gentle and sympathetic in his nature as a woman, firm as adamant in purpose, who knows when and how to speak and who would sacrifice all but his honor rather than divulge a professional secret. Such a doctor has a conscience as sensitive and quick as life itself, and a rule of conduct that is the epitome of human ethics. Although no professor of creed or religion, I would not exchange his chances for immortality with the most devout ecclesiast on earth.

"The profession of medicine has, from time immemorial, been regarded as one of the greatest of the learned sciences, as it is one of the most honorable; and the doctor the logical exponent, at least in his locality, of all the abstruse questions in the universe. Until within the last few years he was supposed to possess some occult knowledge not obtainable by members of other professions, and as long as he was clothed with the presumption of superior learning and held to be immune from ignorance, he was the moral, mental and physical dictator in his community. But alas, and alack! Times have changed and with them the faith of the people. No longer do they follow or worship with a blind credulity. Opportunities are daily offered them to inform themselves upon certain things that were formerly held to be the sacred and exclusive knowledge of the doctor, and with the recent exposition of medical frauds, both in and out of the profession, by our own Council of Pharmacy, and lay journals like *Collier's* and the *Ladies' Home Journal*; and their attendance upon public lectures dealing with medical matters, a healthy suspicion of the genuineness of all things medical has been developed. So, young gentlemen, instead of presuming upon the medical ignorance of your patients, rather go to the other extreme and presume upon their intelligence. To do this will spare you chagrin at times, and save your reputation in your community. You need have no fear, however, that self-medication by the pa-

tient and the non-professional and gratuitous advice of the "next best friend" will rob you of your occupation. After all, the druggist is your best friend, and in the end the drug store patient and soda fountain medicator usually pays two bills in one.

Advantages for Young Men.

"Your predecessors never had the opportunities for good that are presented to the modern physician. As we advance in civilization, civilized crimes are conceived, multiply and leave their degenerating and enervating influences upon the race. To be able to present with force to your patients the all-absorbing and far-reaching questions appertaining to sexual hygiene is an opportunity that should never be missed by you. Your own diplomacy will suggest to you the manner and method of presenting the subject, and to fail in this duty is equally as reprehensible as to neglect to advise against the dangers of the contagion of physical disease.

"In order to be able to defend your medical faith against "the world, the flesh and the devil"—and the power of this unholy trinity is by no means to be underestimated—you must familiarize yourself with the tenets and teachings of all "sects" and "pathies." Unchristian Science, with its deluded followers are abroad in the land. Their hysterical manifestations and neurotic vaporings will be interesting study to those of you who enjoy psychological pathology, and occasionally you will be called upon by an heretic to save a baby or a wife. Do your duty, save the life, and let your soul be filled with charity for their delusions. Fortunately, they have not yet invaded the holy precincts of the country towns and districts where most of you will locate, and it would require more than Eddy aphorisms and unholy incantations to shake the firm faith of the countryman in the potency of "pills, potions and powders," or the kind and encouraging advice of their family physician. I say to you frankly there is more power against the forces of disease in the cork of a Peruna bottle than in all their tomes, and this is acknowledging a great deal.

"One of the most important pieces of advice I can give you, is to at once align yourselves with your county, state and national associations once you have located. Identification with organized medicine and association with your professional brethren, will broaden your professional horizon, sharpen your mental appetite, and withal contribute towards a symmetrical development. If I were a layman, knowing doctors as I do, before selecting my family physician, I would put these interrogatories to him:

"Are you a graduate of a reputable medical college?

"Are you on speaking terms with very many of your brethren?

"Are you a member of your local, state and national societies?

"Do you regularly attend the meetings and actively participate in the deliberations?

"If answered in the affirmative, I would adopt him then and there, and he should be my medical advisor as long as he did his duty to me and mine.

"I said that a doctor should be a stone wall against temptation. In no other profession are the opportunities so great to commit unseen crimes against the race as in ours. You will scarcely get your office furniture arranged before some unfortunate will implore you to relieve her of her shame and hide her disgrace. Foeticide, to my mind, is a greater crime than homicide; in the former case, the victim is helpless and has no power of defense. Once you have yielded to this, the greatest temptation in a doctor's life, easy will become the mental process by which you will arrive at justification in other cases.

Clear Head and No Alcohol.

"If one man more than another should keep a clear head, free from the tanglefoot effects of alcohol, it is he in whose hands are entrusted human lives. Alcohol and a clear brain are as incompatible as truth and falsehood, and woe worth the day you first invoke its influences to stimulate or soothe. Only the doctor has any comprehension of the alcoholic basis of disease, and it becomes your duty to give your support to the present movement to stamp it from the face of the earth and beyond the reach of man. The subject is not only sciological, but also medical, and as a teacher and advisor you cannot evade it if you choose.

"Gentlemen, there are, it seems to me, a thousand fragments of advice I would like to give you before dismissing you, for I believe they would, if heeded, save you from many a shoal in your professional lives. But it is now enough for me to say that while a knowledge of the crystalized experience of your predecessors should be sufficient to save you from their errors, yet you are human, and it seems man chooses to learn from the dear school of experience. But you can profit by the mistakes and wisdom of others, and the reading of medical history should not be neglected by you.

"In conclusion, I give this as my parting advice: Keep your head cool and clear, your feet warm and clean, your conscience quick, live close to nature and nature's God, and if you fail to

achieve success you can intelligently attribute it to disturbed ontogeny over which you had no control.

"I bid you Godspeed and wish you unbounded success."

ADDRESS DELIVERED TO THE GRADUATING
CLASS OF THE COLLEGE OF PHYSICIANS
AND SURGEONS, LITTLE ROCK, AR-
KANSAS, MAY, 1908, BY DR. AR-
THUR E. SWEATLAND,
LITTLE ROCK.

On being asked by the Dean to deliver the faculty address on this occasion, I was taken by surprise. There are other members of the faculty who are more gifted and, therefore, more able to deliver this address than I. I confess of having had thoughts that in about two years from now I might possibly have a chance to moralize a bit, and perhaps drop a few stray crumbs of advice to the class that, the major portion of at least, had spent their four years of study in this institution, and to whom I had first helped to start on their road of ups and downs through the years of acquisition of medical knowledge. Such was not to be, and I assure you of the class of 1908, that I consider it a great pleasure as well as honor to deliver to you the faculty address.

In casting about for a subject on which to talk for this occasion, I have concluded that something of this sort would be of advantage, namely, some of the advantages the graduate has over the undergraduate.

The first requisite for the acquirement of a medical education is to be well grounded in a preliminary way. The greatest fools, it has been my fortune to meet in the profession of medicine, have been the so-called educated ones. There are others, but the above have been the greatest. This does not mean that education in the higher sense should suffer belittlement—far from it. It is always an advantage to a man of sense and reason, and by such is not used ostentatiously, but only for the betterment of himself and mankind. Such should be the broad, common sense education of every prospective student of medicine. Such an education places you where your studies are made easy of comprehension. Such makes the study of your profession a constant source of delight. Ease in comprehension and delight in acquisition are the two chief paths to success. These only come to the man who has acquired that love for knowledge in his youth which is brought about by early teaching and environment. Without fear of contradiction, I can state that environment and early teaching have more to do with one's after

years than all other influences combined. The above two points, therefore, are important. Again I can say without fear of contradiction that there is not a man in this class who goes forth from this institution tonight who has been rocked from infancy in the lap of luxury. None of you has been overburdened with this world's goods. You are not alone, for nearly all medical men are poor, financially. Therefore, it is with a higher sense of pride that the faculty bid you Godspeed. You have shown your metal, you have worked hard to achieve your mark. Some of you have suffered the disadvantage of not having sufficient preliminary education. You have with a fairly high degree of success overcome this deficiency and tonight are rewarded by reaching one more mile post. You have just begun. Each one of you, no doubt, can recall your first year's work in medicine. It was a year of arduous work. It was the important year of your course. The foundation was laid in that year for your future work. Anatomy and physiology, the very heart and soul of the subject, were in the first year well begun. This work was necessarily thorough, in order to proceed in the coming year. The first year, you will agree, was somewhat strenuous to say the least. When the final examinations came for the first year's work, it was with some degree of trepidity that you undertook them. All bones looked alike to you. All hearts were livers, all livers were spleens. You could not tell a knee-jerk from a pain in the stomach. Some of you "flunked" in that examination. Remembering that "not failure, but low aim is crime," you came back to your second year, and went after the prize with increased vigor and renewed energy. Who can stay the tide of human ambition? To the man with a will, there is no fail. Reverses only stimulate to greater endeavor. We need reverses, or we would become slothful. You finish your first year.

With the advent of the second year self-confidence is increased. You begin to learn how to study your subject. Each time you open a book new rays of light gleam through. Every page becomes studded with gems of knowledge. The mind broadens. New faculties develop, as new fields are opened up to view. Truly, study becomes a joy, and acquirement a delight. The whole second year was one of vast possibilities for the future. The examinations of the second year are not feared. The glasses have changed their color.

After the completion of this year, if you have applied yourself, the foundation work is laid and the delightful acquirement of the more practical part of your studies begins. In a practical way, you are taught the various tissues of the body, both of man and other animals under the micro-

scope. First the normal tissues and along beside those the pathological deviations which may be produced by disease. It is at this stage that you begin to take off your hat to your teachers and the men of science who have gone before. As in your first year you did honor to Haeckel and Harvey; you now do honor to Haeckel, Huxley, Virchow and the immortal Darwin. You live with them. Every cell becomes a living thing and every organism a community of cells. Everything changes and the beauties of life are unfolded and multiplied. Your respect for cell life increases and develops. You learn to respect all life wherever it is found, the lower organisms as well as the higher; to feel that life in one place is the same as life in another; that all living cells have souls; and, in the words of Lowell, you exclaim: "Every clod feels a stir of might,

An instinct within it that reaches and towers,
And, groping blindly above it for light,

Climbs to a soul in grass and flowers."

This year takes you back to your own primitive ancestors, when we were all one-celled organisms, and brings us up to our present highly developed condition. All this is beautiful, for it brings out that higher and nobler respect for our brothers, only a little lower down the scale. All this only prepares us for the noble work which we now begin.

The beginning of practical experience is now at hand. You come in contact in a practical way with your life work. Slowly at first, but by constantly coming in contact with patients in the various clinics you begin by an evolutionary process to grasp the essential. This is all practical. You train your sense of hearing to detect deviations from the normal in the lungs and heart. You percuss the body and detect from the sound emanating thereby the increased or diminished size of various organs. You outline in like manner all of the normal organs of the body. By touch you also detect resistance, vibrations, density and consistency of the body.

By this practical application, the eye is trained for close visual observation. In some cases, the sense organs of smell come into action for the purpose of helping to draw conclusions. Even the sense of taste is used in certain instances. Your fingers are taught to observe by the sense of touch that great aid in making a diagnosis—the pulse. Probably this of all other means gives us the one great method of ascertaining underlying conditions. The whole vascular system being controlled by motor, sensory and sympathetic nerves, renders the pulse susceptible to any deviation from the normal which may occur. For this reason, you are taught to carefully examine and study the varying changes which take place in

the pulse, by tactile sensation. The pulse always tells the truth. There is no deviation from the normal which is not expressed to the trained hand when placed upon the artery. Your teacher in chemistry, especially that division known as physiological chemistry, has done his part well. You are taught the basic composition of the animal body, its power of assimilation, secretion and excretion, with their varying changes in health and disease. Truly, this third year of study has been one of great benefit and delight to the mind.

After concluding the partially scientific and partially practical work of the third year in your medical course, you come, gentlemen, to your last year's work. This year has been given over entirely, or nearly so, to actual practice. You have been paying particular attention to the practical side of your life work. The theory and practice of medicine has been placed before you in such a manner as to give the best results. Lectures, both didactic and clinical, have occupied your attention. You have been given an opportunity to study disease under the eye of your teachers, with the patient present. Each clinic has been made an object lesson, and the mistakes you have made here will answer as warnings to guide you from the shoals and rocks in the future. Your work in pediatrics, or diseases of children, has been most complete. This last is of great importance. Illness in children comes on quickly, and needs decisive and instant rebuke, or often dissolution quickly follows. You must be a "baby doctor," or the laurels long sought will never be won. He who can stay the hand of disease in a child, and calm the mother's fears, need have no doubts for future success.

In the field of surgery all of your instructors have endeavored to make it as practical as may be. You have viewed operations, not as a mere looker-on, but as actual assistants to the operators. You have been taught the various operations on the cadaver, so that they are more familiar to you than to many practitioners of years standing. The individual and various divisions of surgery have all been placed before you in turn, and I may say each instructor vied with his brother instructor to give you each the best that was his to be given. This branch has been very enjoyable and practical as well, so much so that in the future years, you will view it with great satisfaction.

Tonight your examinations have been passed, and you have not been found wanting. You are ready to receive your degree in medicine.

Gentlemen of the class 1908, you go forth to your work under many favorable circumstances. The four years of strict application to your medical studies places you in a position to take up the active practice, where it would have taken many

more years had you not had such a thorough training. In the years ago, when the doctor took up the study of medicine by himself, or at best with the preceptor as his only guide, he was obliged to learn by the school of experience, often bitter experience, both to his patient and himself, what you in a large degree have placed at once at your command. Let us not forget to give due praise and reverence to those indefatigable workers, who largely through sheer force of will and a desire to know the truth, have made it possible for you to occupy the position you do tonight. The place you will occupy in the future should be an enviable one. You have a great way the start of your competitor who has not had the advantages of a well regulated course in medicine and, therefore, much more is expected and required of you. You are placed at once in touch with those who stand highest in the profession wherever you may be.

Socially you may reach whatever prominence your fancy may choose. In politics, well, there, too, the bars are let down, but I beg of you, for your own sake, if not for your God's sake, to keep out of factional politics. This four years of work you have just completed has given you a mental drill, the value of which can not be estimated. Your deductions are brought about by logical reasoning, miracles to you have ceased to be. They have no place in science. There is now a "demand for causality" in your reasoning. Statements are not taken for granted, but must be investigated and found to conform to certain reasonings before being accepted. You may now even begin to think for yourselves, and once you get in the habit of thinking, it isn't half as difficult a matter as you might suppose.

"Think for thyself, one good idea, known to be thine own,
Is better than a thousand gleaned from fields by others sown."

Gentlemen, tonight is only the beginning. While your teachers have imparted what they could in the allotted time, it is impossible for the human mind to grasp at once the full import of all that

is taught. Certain things, therefore, must be worked out by yourself alone at the bedside. While you have been taught a fair measure of the science of medicine, the art of medicine must be acquired. In the past 25 years I believe the science of medicine has taken precedence over the art of medicine. Prior to this time the art was the principal part of medicine. Necessarily and naturally enough when the microscope became perfected and we began to study the lowest forms of life and their relation to disease the science of medicine went forward with leaps and bounds. More has been learned about the scientific side of medicine in the past 25 years than in its whole previous history. What was at first known as the germ theory of disease no longer remains a theory, but has become a fact. Disease was then classified with reference to the particular germ that produced it. Along with this discovery of bacteria and their relation to disease came hand in hand the great chemical discoveries with exact scientific study of the composition of the animal body, its assimilative, secretive and excretive properties. It was at this time that the germ theory was applied to the field of surgery. Prior to this the horrors following surgical operations from septic infection followed by gangrene, suppuration, sloughing, horrible suffering and many times death became a thing of the past. Naturally, in the mad rush after the very important scientific part of medicine the art of medicine suffered.

Gentlemen, tonight you are cast adrift to battle with the sea of human ills. Be fighters. Never give up the ship so long as life may last, for many times a courageous, brave heart will steer a shattered hulk to a safe harbor. I am certain that I voice the sentiment of this faculty when I say that we have high hopes for you all. Some of you will reach a higher plane of success than others; but we trust that when on the firing line every one of you will be ready to do battle, for fight you must, and no one is called upon more often to show his metal than the physician. I bid you Godspeed.

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Editorials

THE LITTLE ROCK MEETING.

The thirty-third annual session of the Arkansas Medical Society is now at hand, and at this writing many delegates and members are arriving. All indications point to an increased attendance over former years, reports from component societies justifying this statement.

The program was printed in the April number and gives an idea of the scope and character of the scientific work to be accomplished; and it only remains for the essayists to be present with their papers to insure a great meeting.

The House of Delegates will be called to order by the President, Dr. Stephenson, at 9 o'clock Tuesday morning for the despatch of business. Excepting the adoption or rejection of the two proposed amendments to the By-Laws, there will be little else than routine business for transaction, and in all probability all business will be disposed of the first day, giving the delegates an opportunity to attend the sectional meetings.

Entertainments have been arranged for the pleasure of the visitors, and nothing has been overlooked to make the social feature of the meeting a success. Drs. Vinsonhaler and Sweetland, have had these matters in hand, being ably assisted by Mrs. J. M. Sheppard and a corps of lady assistants.

Hotel accommodations will be sufficient for all who come.

Dr. Joseph Price, of Philadelphia, Dr. N. S. Davis, of Chicago, Dr. William Hunt Stucky, of Louisville, Dr. J. Ross Snyder, of Birmingham, will be guests of the Society and each will contribute a paper.

THE CHICAGO MEETING.

The coming meeting of the American Medical Association to be held at Chicago next month will, unless all indications fail, be the largest in the history of the organization. The central location of Chicago, its easy accessibility from all points of the country, the splendid program promised and the natural desire of most

doctors to steal a little rest before the beginning of summer, will contribute towards insuring a large attendance. Another feature that will draw many doctors is the series of free clinics extending over a period of two weeks that have been arranged to be held immediately after adjournment. Many of America's greatest teachers are on the program. Entertainments of varied characters have been arranged for the visitors, and every taste should be satisfied. Several distinguished visitors from abroad, notably amongst them being Schaefer, of Edinburg, Scotland; Dr. August Martin, of Griefswald, Germany and E. Treachber Collins, of London, England, will be present and contribute to the scientific work. Not since 1901 has the meeting been held so nearly in the center of the country, and there should be a large representation from Arkansas.

ALUMNI SMOKER.

The faculty of the Medical Department of the University of Arkansas will give a smoker complimentary to the members of the Alumni Association of the college at the Hotel Marion Tuesday evening, June 23, at 8:30. Dr. Vinsonhaler will preside as master of ceremonies. Plates have been arranged for two hundred guests. The officers of the Association are: Dr. Chas. E. Hurley, President, Bentonville; Dr. W. A. Snodgrass, Vice-President, Little Rock; Dr. Buchanan, Prescott, Secretary-Treasurer.

COMMENCEMENT EXERCISES OF LITTLE ROCK MEDICAL COLLEGES.

The annual commencement exercises of the two medical colleges of Little Rock, the College of Physicians and Surgeons and the Medical Department of the University of Arkansas, were held respectively on April 30th and May 1st. The exercises of the College of Physicians and Surgeons were held at the College on Lincoln Avenue. Rev. W. D. Buckner of Pine Bluff, delivered the doctorate address and Dr. Arthur E. Sweatland, of Little Rock, the address on behalf of the faculty. There were 15 graduates, Dr. Joseph P. Runyan, the Dean, conferring the degrees.

The exercises of the University of Arkansas,

were held in the auditorium of the Y. M. C. A. Dr. H. S. Hartzog, L.L.D., President of Ouachita College, delivered the annual address and Dr. Morgan Smith, of Little Rock, the faculty address. Degrees were conferred upon a class of 21 by the Dean, Dr. Jas. H. Lenow, Gov. Pindall, in a few well-chosen words, delivered the diplomas to the members of the class.

THE COUNTY SOCIETY AND ITS SECRETARY.

Dr. B. R. McClellan, of Xenia, Ohio, President of the Ohio State Medical Society, in his presidential address at the last meeting of the society, made the following remarks concerning county societies and secretaries. Dr. McClellan, like our last President, Dr. Percy, spent a great deal of time in visiting the county societies during his term of office and undoubtedly knows whereof he speaks:

"During the year past, it has been the pleasure as well as the duty of the speaker to visit many of the county societies of our state. Without exception can it be said that wherever many men were found who really graced our profession there was to be found a good medical society with men living in harmony with each other. On the other hand, where many men were found who disgraced their calling, whose offices were dingy and untidy and devoid of modern equipment; where the men themselves, unshaven and in soiled linen, spent much time scandalizing each other, there organization languished and harmony and good fellowship were untasted and unknown fruits. As a rule, the fault lay at the door of an incompetent secretary. So important is the duty of a county secretary that many of us are not willing to accept the dictum of that prince of secretaries, Dr. John B. Donaldson, of Cannonsburg, Pa., who says that 'anything may do for a President of a county society, but not so as to a Secretary.'

"Undoubtedly the secret of his success is found in that other expression, to wit; 'I would rather be secretary of a county than president of the American Medical Association.' Such a lofty conception of the possibilities for doing things, that make for the uplift of our profession, is proof positive of qualification for such service."—Illinois Medical Journal.

Selections

PRINCIPLES OF FEEDING IN TYPHOID AND IN OTHER FEVERS. Kinnicutt (Boston Medical & Surgical Journal), states that there are at present two methods of feeding in vogue in typhoid fever: The fluid diet, consisting mainly of milk; and a mixed diet, in part solid. The author gives the dietary prescribed by Shattuck in the Massachusetts General Hospital; of Marsden, used in the Monsall Hospital in England; of Bushuyev, used in the Kief Military Hospital, Russia. A literature of the methods employed by other clinicians are spoken of, and Kinnicutt finally concludes that the statistics seem to point out that intestinal accidents, hemorrhage, and perforation are less frequent under the restricted fluid diet, consisting mainly of milk. The statistics for relapses, intercurrent and ordinary, seem to point to the view generally entertained at the present day that diet probably has little influence in their causation. The author believe that the influence of diet in causing simple recrudescence of fever is a real one, but due rather to abrupt changes in diet than to its quality, and he pleads for a different dietetic management of typhoid fever, which should be adapted to the individual case, and based upon the recognition, (1) that, while the digestive function in many cases of the disease is unquestionably seriously impaired, frequently the impairment is not a material one; (2) that a clean tongue, a true appetite, hunger, should be accepted as guides for the cautious employment of a more generous diet; and (3) that the individual rather than the disease is to be considered and treated.—N. Y. Medical Journal.

TREATMENT OF NEPHRITIS. One of the prime objects of treatment, (James M. Anders, *Therapeutic Gazette*), is to meet the dietetic, therapeutic, and hygienic indications presented by the underlying acute or chronic nephritis when evidenced by the characteristic symptoms in the given case.

As elsewhere stated, the diet exerts an important influence upon the course and symptomatology, more especially the nervous phenomena of the disease, thus postponing if not preventing

the later development of true contracted kidney. In chronic nephritis, a dietary that will meet the requirements of nutrition, plus the loss of albumen that takes place through the kidneys, ranging from one to three drachms daily, should be adopted, but this limit should not be exceeded. On the other hand, the unfavorable effects of an insufficient diet react prejudicially upon the kidney lesions, hastening, rather than postponing, the final stage with its serious complications, including uremia. As will appear hereafter in uremic, and even pre-uremic, states a greater restriction of diet is indicated.

Any plan of treatment of uremia that does not include prophylactic measures must be considered incomplete. This dictum also presupposes the recognition by the clinician of the premonitory stage, during which there may be noted a variable number of the following symptoms: uneasiness, mental wandering, delirium, nausea, a dry, heavily coated tongue, foul breath, headache, and a tense pulse. These milder manifestations are a signal for diaphoresis, catharsis, and diuresis of the most prompt and efficient sort.

Additionally, nitroglycerin is to be employed freely; it usually brings about a reduction of the vascular tension and renders the second aortic sound less accentuated. In cases in which nitroglycerin fails to decrease satisfactorily the arterial tension, I have found it highly advantageous to combine aconite, which lowers blood-pressure in acute uremia, while at the same time exercising a diuretic and diaphoretic influence. The dosage must be proportioned to the degree of abnormal pressure, but even in cases in which the vascular tension was high, one-minim doses of nitroglycerin combined with two-minim doses of tincture of aconite radialis, administered every third hour, proved signally successful. Unfortunately, it is, as a rule, impossible to effect elimination through the kidneys owing to the presence of advanced structural changes.

Robinson is inclined to order repeated doses of sweet spirit of nitre, or to add a teaspoonful to a tumbler of water and request the patient to drink a mouthful of it every hour or two to excite diaphoresis. He continues: "The nitre relaxes the arteries (as nitroglycerin and the ni-

trites), acts as a diaphoretic, and is effective and innocent.²² I can confirm this statement from my own recent experience. Hot wet packs, or the dry hot-air bath, usually induce copious sweating and prompt elimination of the unknown poisons through the skin. It has been claimed that the electric light bath possesses a decided advantage over the hot packs and dry hot-air baths, in that it promptly induces diaphoresis without elevating the temperature of the surrounding air; also that there is greater elimination through the skin and no prostration, so that it may be continued for a long time. Saline laxatives from the best means of accomplishing catharsis: they are to be given in concentrate solution when the stomach is fasting.

Elaterium, or preferably its neutral principle, elaterin, in the form of trituratio elaterini (dose 1-4 to 1 grain), may also be used; it exerts prompt action and produces large, watery stools. When the patient is comatose and cannot swallow, intestinal elimination is accomplished with great difficulty.

Pilocarpine has many warm advocates, and its efficacy as an eliminant is undoubted since it acts upon the entire human secretory apparatus. The most eligible preparation is pilocarpine hydrochlorate, which may be administered hypodermically, the dose ranging from 1-8 to 1-4 grain. My experience of the use of this remedy is quite limited, and I find myself in accord with the views so well expressed by Forchheimer regarding its employment: "The danger in its use, especially in children, has prevented me from administering this drug in a routine way, and I reserve it for those conditions in which the other diaphoretics and the cathartics do not produce the required effects. I should certainly hesitate to give pilocarpine when there is any danger of development of pulmonary edema, nor should I be consoled if such edema did occur, even though I had added atropin to it."

The diet is to be restricted to articles that give rise to the smallest accumulation in the blood of residual nitrogenous bodies. On this ground I hold it to be all-important to allow only the blandest fluid foods, as skimmed milk, or buttermilk, or even whole milk, preferably

hot. In chronic uremia the dieting does not need to be so severely rigorous as in the acute form, and must be determined for the individual case.

It is true, as has been claimed, that there is no precise evidence to show that the sweat or the urine in uremia, after the use of diaphoretics, contain any of the albuminoid or alkaloid bodies that must be accused of causing the distressing symptoms of the condition, but I feel strongly that serious and even dangerous uremic manifestations can be averted by the general plan of management recommended above.

When the milder manifestations are not thus controlled, and in all cases of either uremic convulsions or actual coma, heroic measures must, in addition, be brought promptly into requisition. Uremic coma calls loudly for active catharsis. In cases in which high tension is associated, it must be quickly reduced. If the patient in convulsions be robust and plethoric, venesection, withdrawing from 16 to 30 ounces of blood, should be practiced. This measure diminishes the toxicity of the blood, and its efficacy is greatly enhanced by an intravenous counter-injection of large quantities of normal salt solution, which further reduces the toxicity of the blood by diluting it. As a result of these combined measures—venesection and injection of saline solution—cures have been reported, and I have observed one case apparently moribund in which recovery ensued. The operation of bloodletting may be repeated at the end of twenty-four hours if deemed necessary.

The question whether morphine should be prescribed in cases of uremic convulsions is still subject to discussion, although the balance of authority is in favor of its employment. It is generally held to be effective in lessening the number and severity of convulsive seizures. MacKenzie, to whom we owe its introduction as a remedy in uremic convulsions, the late A. L. Loomis, Osler, Delafield, and others, have all warmly advocated its use. Tyson holds that it produces harmful effects in the convulsions of chronic interstitial nephritis, and with this view I am inclined to agree. On the other hand, in acute nephritis and the chronic parenchymatous variety I have witnessed excellent results from its use, hypodermically.

Chloroform and ether inhalations are worthy of a thorough trial in extreme cases, but are less successful than morphine appropriately exhibited. The one leading objection to chloroform and ether is that their effects are too evanescent. Neither do they meet the important indications arising from the etiologic conditions. The convulsions can also be controlled by chloral given by the mouth or by the rectum, in dosage of from 10 to 20 grains if administered by the mouth, or 30 to 40 grains per rectum. This dosage must be repeated, (first at half-hour intervals, afterward at one- to two-hour intervals, promptly withdrawing the remedy, however, as soon as the spasms are controlled.

Le Fevre has pointed out that the advantage of chloral over chloroform is that it has a more lasting action, although it merely antagonizes the effects of the causative toxins upon the nervous system.

For the dyspnea which attends and is spasmodic in character and origin, I would advise antispasmodics and nervous sedatives. Respiratory stimulants, as strychnine, atropine, and the like, have failed in my experience to meet this symptomatic indication.

The gastrointestinal group of symptoms may demand the physician's attention. It is to be recollected that they merely, indicate an effort on the part of nature to rid the system of toxins. This tendency to self-elimination should be encouraged by lavage, both gastric and intestinal. Astringents are not permissible, but purgatives may be employed, for the double purpose of removing the toxin formed in the intestines and averting their absorption into the general circulation. Obviously, no attempt should be made to arrest a uremic diarrhea.

The treatment as above described is intended to serve as a general guide; it will not be found to be universally applicable, since the symptomatic indications manifest wide differences in different cases. With all our vast hygienic and therapeutic recourses, there should be scope for real achievement in the treatment of uremia, but seriously considered the triumphs of our profession in the past and present in this direction are not desirable auguries for the future.

THE SIGNS OF DEATH. Dr. W. E. Taylor (*Atlantic Journal-Record of Medicine*) says that Dr. Icard has discovered a test proof of death which is not only an early one, but is simple and infallible. Putrefaction, as he has mentioned, is one sign besides the permanent cessation of circulation, which is a positive sign of death. The circulation may apparently cease and then resume again, and its detection is difficult. Putrefaction begins only when life ceases, and it is toward the earliest possible detection of this that the author bends his energies.

Decomposition begins, in all probability, in the lungs, and it is at this point that it is most easily detected. The first products of decomposition are the sulphides of hydrogen and ammonium which are liberated in considerable quantity from the free and moist surface of the respiratory tract and escape from the nostrils if the mouth be kept closed. There are no sulphurous gases found in the body during life, either in the bowels, stomach, or even in foetal, bronchial or lung conditions, at least sufficient to give a test for the same. After death the quantity is very large, and a test can be made and the presence of gas, as well as the absence of life or any probability of its return, proven to the naked eye of any observer.

Dr. Icard resorts to a very ingenious and simple method to detect this gas. He takes a piece of filter paper moistened in a neutral solution of lead acetate in two parts of distilled water and places it either in or over the nostrils. The hydrogen sulphide gas escaping and coming in contact with the lead forms black sulphide, blackening the paper, and thus making an indelible sign of death. In the absence of the lead acetate solution a freshly-brightened piece of copper or silver money will serve as well, and the blackened or tarnished stain of silver or copper sulphide is left upon the coin. These signs are easily obtainable within from 12 to 36 hours after death, according to climatic conditions. The author thinks that this test should be resorted to in all cases before a burial permit is given, and recommends that its observance be compelled by legal measures.—Medical Review of Reviews.

EPIDIDYMITIS. In the *New York Medical Journal* for July 27, Julius J. Valentine asserts concerning gonorrheal epididymitis, that no patient treated by irrigations for gonorrhea acquires epididymitis unless the epididymis is involved when he presents himself for the first examination; the development of epididymitis is then exceptional. Galvanism yields brilliant results in the inception of this complication. Pain is promptly arrested, and the swelling soon recedes. As regards local applications, a slight modification of the ointment of Prof. Leopold Casper is recommended. It consists of ichthyol 25 parts, guaiacol 5 parts, mercurial ointment 10 parts, petrolatum and wool-fat, aa ad 30 parts. This ointment is thickly spread upon four layers of gauze cut of a size to completely cover the scrotum containing the inflamed epididymis; over the gauze a layer of cotton is placed; this is enveloped with a sheet of oil silk and all firmly compressed with a strong suspensory bandage, selected to thoroughly compress the scrotum, and hold it immovable against the ascending pubic rami. Painting the scrotum with silver nitrate, tincture iodine, guaiacol, etc., have been discarded, and the use of ice applications is commended. The time honored flaxseed and tobacco poultice is still recommended when the scrotum is extensively involved in the inflammation as shown by intense reddening and such hyperesthesia as to prevent manipulation of any kind. In some cases of hyperacute epididymitis heat is not borne and even increases the suffering. Then the ordinary lead and opium renders excellent service. When inflammation of the epididymis has not extended to the cord, or involves only its lower third, Fricke's strapping is the most effective method of treatment. When tense edema accompanies epididymitis, or when local hyperemia is very great, relief and aid to treatment are readily obtained by numerous slight punctures into the superficial layers of the scrotum.—Cleveland Medical Journal.

eotomy was an operation that was necessarily confined to hospital practice, owing to the need of assistants and the necessity for absolute asepsis in the surroundings. Pubiotomy by the subcutaneous method need involve no danger of infection. It may be done in the dwellings of the poor, with the assistance of students, or even of the laity, provided the operator can obtain sufficient light and room, and a firm table, on both sides of which the operator can pass. Few instruments and dressings are needed; hemorrhage is very moderate, and occurs in the form of a small hematoma contained within the tissues. The author has done pubiotomy five times in the patient's own house, and all the patients have recovered perfectly, with a firm gait and no disabilities. All the children have been delivered alive. All the instruments that he needed were a pubiotomy needle and some ordinary needles armed with sterilized catgut and sterilized gauze for tampons. It is well to have two flat specula to protect the vagina during artificial delivery of the child. The author describes his five cases. Labor was normal and without pain. There were no lesions of the vagina during delivery. The only complication was a small abscess from a subcutaneous hematoma. The labor can be shortened by performing pubiotomy as soon as the head is fixed by the contractions. In multiparae with well-stretched genitals a not too rapid forcep operation may be done without any damage to the parts. The extraction can be done without stopping the anesthesia, which is a great advantage in a private house. The after-treatment is very simple: a piece of gauze and some cotton, and a bit of plaster over the puncture, a towel about the pelvis, and for one week a catheter retained in the urethra include all that is necessary. At the end of three weeks the patient may get up. Forty patients operated on in this way in the clinic have been cured. Lesions of the bladder have been few and of little importance. The same may be said of hematomata. If the section is made near the median line the pelvis separates easily and not too far. When it is too far out results are not so good. Any experienced physician accustomed to handle instruments and obstetric operations may successfully accomplish pubiotomy in a private

PUBIOTOMY IN PRIVATE PRACTICE.
W. Sigwart (*Zent. f. Gyn.*, May 18, 1907) advocates the use of pubiotomy in suitable cases in private as well as hospital practice. Symphys-

house.—American Journal Obstetrics and Gynecology.

DIAGNOSIS OF SCARLET FEVER.

A. R. Braunlich (*Arch. of Ped.*, March, 1907) says that, in arriving at a diagnosis, the course of events in a typical case must be kept in mind, as there is a regularity in the order of appearance of the symptoms, whether the case is severe or mild. With the usual sudden onset, with disturbances of the stomach, nausea or vomiting, and occasionally convulsions, the diagnosis is based on the following objective symptoms: Condition of the tongue, the temperature, the pulse rate, the rash, and the condition of the throat. The tongue, in the majority of cases, during the entire course of this disease, shows nothing more than the ordinary fever coating. The real denuded strawberry tongue, *i. e.* a bright-red tongue with large papillæ and either no coating or only a light coating on the posterior half, appears on the fourth or fifth day; and, occurring *then*, is of the greatest significance. Such a tongue seen on the first or second day of the disease should carry no weight as a diagnostic feature. Fever is, as a rule, present. There are exceptional cases where the temperature never goes above 99° F., the cases being typical in other respects. In young children the typical temperature curve is rarely seen. On the contrary, the temperature may be most irregular. The pulse is invariably rapid, being elevated more than the usual eight or nine beats for each degree of fever. The rash may appear within a few hours, and always appears within forty-eight hours after the onset of the disease, and regularly travels downward. It first appears on the neck and chest, at times not reaching the lower limbs until the second or third day. If the case is seen as late as the third or fourth day, the rash on the trunk may have entirely faded. The typical punctate erythema is not always easily distinguishable, and the varying surface congestion frequently alters the appearance. The regular erythema may be accompanied by blotches resembling measles, and usually on the extremities. The erythema may be very faint on some parts of the body and brighter on others. It may be

well developed only in the flexures of the joints. The rash and inflammation of the throat are necessary for a diagnosis. At present there are in this city a number of cases in which the diagnosis cannot now be made between German measles and scarlet fever. The patients with German measles apparently recover in about four days. They do not desquamate, or do so less freely than typical scarlet fever. The time of desquamation is important. Peeling in scarlet fever does not begin on the hands before the latter half of the second week.—American Journal Obstetrics and Gynecology.

VICIOUS CIRCLES.

Hurry (*British Medical Journal*) denotes by the term "vicious circle" a morbid condition in which cause and effect are so correlated that cause becomes effect, and effect becomes cause. Physiological or healthy circles are always operative in the body; among them may be mentioned the processes of hæmogenesis and hæmolysis, the reciprocal relation between the condition of the blood and the respiratory function, etc. The various vicious circles may be grouped as follows: 1. Organic circles. Here are included circles arising between two organs so interdependent that when the first is diseased and in difficulty, the second, becoming in turn affected, upsets the first and *vice versa*. The lungs and heart in acute pneumonia furnish a good example. 2. Symptomatic circles. Here the circle is formed by a diseased organ and one or more symptoms, due to and aggravating the morbid processes. For example, adenoids leads to mouth breathing, which in turn provokes a further development of adenoids. Other examples are dental caries due to oral sepsis, pulmonary hæmorrhage causing coughing, etc. 3. Infective circles. Children suffering from oxyuriasis furnish a good example of an infective vicious circle. The irritation and consequent scratching leads to portions of the worms and to their eggs being caught under the nails, conveyed to the mouth, and swallowed by the host. Thence the ova pass into the intestines and rapidly attain sexual maturity. In this way the irritation secures, by autoinfection, successive generations of the parasite. 4. Neurotic circles.

To this group belong such vicious conditions, without any evidence of organic disease. 5. Chemical circles. A chemical vicious circle occurs in diabetes mellitus, in reference to the two important conditions of polydipsia and polyuria. The polydipsia leads to dilution of the patient's blood and thus promotes the excretion of sugar and the associated polyuria. The polyuria, on the other hand (by depriving the system of a large quantity of fluid), leads to greater concentration of the blood, and consequently to thirst and polydipsia. 6. Mechanical vicious circles are formed when abnormal pressure or tension relations act and react reciprocally on each other. An example is met with when a retroverted gravid uterus becomes so impacted in the pelvis as to press on the urethra and cause retention of urine. The distended bladder increases the retroversion and the impaction; the retroversion increases the retention. Similar effects may be produced by myomata or other pelvic tumors. In ascites pressure on the renal veins may lead to ischuria, which in turn aggravates the ascites. 7. Artificial circles. To this group are relegated such vicious circles as do not rise in the ordinary course of disease, but have an artificial origin. Such are the circles associated with indulgence in alcohol, tobacco, opium, or similar narcotics, etc.—New York Medical Journal.

THE PRESENT STATUS OF OUR KNOWLEDGE OF PARASITOLOGY OF SYPHILIS. Professor Hoffmann, of Berlin, read a paper upon this subject before the Dermatological Congress, New York, September, 1907, in which he said that the ætiological importance of the *spirochæta pallida* has been indisputably demonstrated and is practically universally admitted. As regards the morphological and biological properties of the parasites, these were accurately described by Schaudinn, to whose work but little has been added since. The *spirochæta* of syphilis presents in shape an extremely fine spiral with numerous abrupt and regular twists (corkscrew shape). It is weakly refractive, and hence not readily recognized in the fresh condi-

tion without special adjustments (darkened microscopical field). The sum total of its properties is sufficient and conclusive for the diagnosis, although none of these properties taken by itself is absolutely characteristic. (Great length, averaging 8-15 mm., of the thread in proportion to the very slight thickness, about $\frac{1}{4}$ mm.; relatively slight variability of shape, due to the great elasticity of the spiral; manner of motion in fresh specimens; reddish tint in specimens stained according to Giemsa). It is sometimes difficult to differentiate the parasite from certain varieties of the dental and intestinal *spirochæta*, and its distinction from the *spirochæta pallidula* of Castellani (*spirochæta frambœsiæ*) would hardly seem to be absolutely certain at the present time, although a few minor characteristics were found by v. Prowazek.

Concerning the finer structure of the *spirochæta*, it frequently presents long terminal threads terminating in a point (Schaudinn's flagellæ). An undulating membrane or distinct nuclei, as observed in the larger *spirochæta*, have not as yet been demonstrated; presumably the nuclear substance is distributed throughout the entire length of the spiral in shape of extremely fine granules. Sometimes nodular bulgings of the thread are found in Giemsa specimens, as well as silver preparations, perhaps referable to an accumulation of the chromatia. The ends of the syphilis-*spirochæta* may be transformed into small globular structures, the so-called terminal bodies, which occasionally appear in shape of a loop. Sometimes the thread is distinctly seen to be rolled upon itself.

Certain authors assume a rectilinear form to be characteristic of the products of late syphilis. This view is not justifiable, however, since these forms are observed to occur not only in late but also in recent syphilis. They are formed more frequently and more distinctly in sections than in smears. Disintegration into individual segments, down to dissolution into a series of granules, may likewise be demonstrated rather frequently in sections of all sorts of pathological products.

Some authors, including the author if this

paper, assume the manner of propagation to be longitudinal fission, with Schaudinn, whereas others are in favor of transverse division, like Metschnikoff and Levaditi. The posthumous papers of Schaudinn contain a definite statement to the effect that he frequently noted upon living specimens a longitudinal division beginning by the duplication of one of the terminal threads. The author observed the same process in fresh specimens of the spirochæta balanitidis.

All attempts at *culture* have hitherto proved unsuccessful. As to the further biological properties of the syphilis-spirochæta, it usually remains actively motile only for a few hours in fresh airtight preparations. While weak movements may sometimes be demonstrated during several days, it does not seem to have been positively shown that a certain motility may be preserved at the end of a few weeks. It is positive, however, that specimens prepared after this manner may show syphilis-spirochætes as well as other species of spirochætes in well-preserved individual germs, as far as their shape is concerned, even at the end of months.

Complete unrolling and wreath-shaped folding, followed by a return to the former actively motile form, were observed by Hoffmann in these specimens not only, but also in the blood of children having congenital syphilis. Spontaneous agglutination was observed by him, as well as by Landsteiner and Mucha, in the serum of papules, etc., a few hours after withdrawal. Normal human serum, as well as serum from syphilitic patients, was further found to exert a certain inhibitory action upon the motility of the spirochætes, without, however, producing a distinct agglutination. The old observation of Hoffmann and v. Prowazek to the effect that the serum of untreated syphilitics, the disease dating from six to eight months back, may sometimes inhibit motility and give rise to a phenomenon of agglomeration, is claimed to have been repeatedly confirmed of late by Zabolotny and Maslakowitz.

As regards the occurrence of the spirochæta pallida in the various pathological foci, it has been positively shown that it is present and demonstrable, in variable number, in all pro-

ducts which still contain some of the virus, and which can be inoculated. In acquired syphilis the demonstration is usually easy in tissue juice, irritative or aspirated serum from primary sores, or genital, anal and mucous papules and erosions. It is pretty constant also in pustular, crusty and papular skin syphilides of the early stage, and in the puncture juice of swollen lymph glands.

Conditions differ in congenital syphilis, where there is frequently an actual inundation of the organism with the parasites. In the severer cases especially the spirochætes may be demonstrated in the efflorescences of the skin and mucous membranes not only, but also in the lymph glands, and even in the circulating blood. They have been found in very large numbers in the various internal organs of the foetus, as well as of little children dead from syphilis. The liver usually contains the greatest quantities of the spirochætès, which may appear in the various secretions and excretions of the body. In cases of congenital syphilis the spirochæta pallida was frequently demonstrated in the blood of living children (dark-field illumination), not only those who promptly succumbed to the disease, but also those who subsequently recovered under mercury.

The distribution of the germs in the affected tissues and organs is not uniform in character. In a general way they may be said to be most profuse in the marginal zone and in the immediate vicinity of the pathological foci, whereas they are apt to be more scanty and often entirely absent in the spots which were affected the most severely and for the longest time. Phagocytosis plays a certain part in the destruction of the germs. The spirochætes present a very irregular arrangement, and are sometimes found in the course of certain lymph vessels, where they lie in the vascular lumen, between the endothelia, in the adventitial tissue, and especially in young budding blood-vessels, which grow into the hitherto unchanged connective tissue, and are often positively interspersed with spirochætes. Ehrmann pointed out that more or less distinct bunches of spirochætes are found within leukocytes and lymphocytes. The most striking pictures of this kind

were seen by the author in leukocytes within the alveolar lumina of the lung in a case of white pneumonia.

Certain recent investigations of secondary syphilitic exanthemata show the spirochaetes to be chiefly present in the dilated bloodvessels of macular syphilides and in the deeper layers of the proliferated cells of the rete in the papu-groups and bundles with all the signs of disintegration are found also outside of the cells, in part within the vascular lumina. These phenomena are explained only by the action of antibodies in the serum. Meanwhile, the defensive forces of the organism do not by any means invariably destroy all the parasites in the pathological foci.

The blood does not offer favorable conditions for the spirochaeta pallida, which, in the author's opinion, is a parasite adapted to the narrow spaces of the lymphatic system, the system primarily and preferably affected in syphilis.

The location of the spirochaetes during the latent stage of the disease has not as yet been definitely ascertained, but it is known that they may be found at a late date in the residues or scars of hard chancres and exanthemata. Mercury, as a rule, causes a rapid subsidence of the majority of the parasites in the pathological products, but some of them remain demonstrable for a long time during the treatment. The mode of action of mercury is not yet well known, and the same is true for atoxyl.

These briefly-outlined findings in the human subject are in themselves sufficient for the practically positive demonstration of the aetiological importance of the spirochaeta pallida. Any remaining doubt is removed by the fact that the spirochaetes of various laboratory animals, even after a number of passages (13), perfectly correspond to those observed in the human organism. No other micro-organisms enter into consideration for the aetiology of syphilis.

The spirochaeta pallida possesses a great diagnostic importance. The demonstration of its presence permits the diagnosis of recent primary sores, suspicious erosions of the genital organs and mucous membranes, glandular swell-

ings (puncture), and other obscure conditions. In congenital syphilis the examination of the blood (especially under dark-field illumination) is of very great importance. Positive findings are conclusive, whereas negative results should be utilized very cautiously only.

The possibility of recognizing and excising quite recent primary sores is an important point in the treatment. From the prophylactic point of view also, the timely removal of the first pathological focus, which contains the largest amount of the poison, and the prevention or restriction of the secondary phenomena, are extremely valuable.

The author holds that in these cases the mercury treatment must not be omitted, because, according to past experience, the spirochaetes promptly enter the lymph and blood channels, and because it is never certain that the poison is not surreptitiously developing at some point of the body (such as the vascular walls or the nervous system), even in those cases where the general symptoms fail to occur during months or years. Whether to institute the first part of the treatment at once as advocated by Thalmann and done by the author in a series of cases, or whether to begin only with the onset of secondary symptoms, or at the usual time of their occurrence, should they fail to develop—these questions can only be settled by the experience of years to come. The complete prevention of the general phenomena is usually a failure, even in the immediate method.

With special reference to the atoxyl treatment, as recently recommended, it may be stated that atoxyl was found to possess a protecting or preventive action for monkeys and rabbits, and apparently to favor recovery in the former, in the animal experimentation of Uhlenhuth, Hoffmann and Metschnikoff. Several observations upon man showed atoxyl to possess an unmistakable influence upon the majority of syphilitic manifestations. Especially in ulcerating syphilides of the skin and obstinate affections of the tongue it may prove useful even after mercury and iodide have failed. In these cases, and in idiosyncrasy against these chief remedies, atoxyl may be welcomed as a valuable

new medicament. It should be kept in mind, however, that it often exhibits certain unpleasant and actually dangerous by-effects; the administration of large quantities may be followed by aneurosis. This idea expressed by certain French authors as to it being equivalent or even superior to mercury is based upon an error.

THE KEELEY CURE

About thirty years ago one Leslie E. Keeley, a practitioner of Dwight, Illinois, conceived the idea of treating inebriety and, taking a preacher-lawyer into his confidence, advertised extensively that he had discovered a new treatment for this disease which he christened "The Double Chloride of Gold Cure." In 1882 we had occasion to visit Dwight for a few days and met Dr. Keeley, a few minutes, in his office, which had all the characteristics of a slovenly country doctor's shop, and gave very little premonition of the gold which soon after began to pour into his lap and, when the institute was at its best, had a considerable influence in building up the town of Dwight. From what has since developed, it appears that, outside of the gold left by the "students," very little of this metal was to be found in Keeley's establishment. So skillful was Dr. Keeley or his associate as advertisers, that an immense business was quickly developed, and the "parent institution," as the Dwight Institute came to be known, had at one time four or five hundred "students," taking the "cure."

So great was the impression made upon the public mind that the Illinois Legislature, in or about 1899, seriously considered the passage of a law, requiring the counties to pay the cost of treating inebriates by this method. This unprecedented action of the legislature was fortunately thwarted by the good sense of some one, but nothing could better show the poor judgment of our lawmakers regarding medical subjects, than the exposure of the Keeley cure, and their mistaken attitude regarding it. Many people suppose that the gold cure has suffered an eclipse, but this is quite a mistake. While the number of persons taking treatment at Dwight is probably at this time not more than

seventy-five or a hundred, yet so skillfully have the proprietors carried on their business arrangements, that branch institutions are carried on by the dozens over the world. These branches, we are informed, get all the medicines used in the "cures" from the "parent institution" at Dwight, paying exorbitant prices for them, and in this manner a constant stream of gold flows to the promoters.

J. R. Oughton, a former drug clerk, is probably the one who has made the greatest profit out of the affair, and he is said to live in magnificence, indicating a large estate. A lawsuit with one of these branches has brought out the true inwardness of the entire scheme.

From the foregoing it will be seen that the exposure of the Keeley system has interest for every medical man, and especially for every Illinois practitioner, because the system was developed in this state, and our lawmakers were so nearly humbugged by the specious pleas of the proprietors. It is with considerable satisfaction, therefore, that we give place to an exposure of the cure, which has been made in a pamphlet, giving in full the opinion of Judge Cochran of the United States Court of Appeals, in the case of the Memphis Keeley Institute, appellants, vs. The Leslie E. Keeley Company, appellee.

From the opinion it appears that the Memphis concern has been enjoined by the original Keeley Company from claiming that it had a right to use the Keeley remedies and the contract between the two had been canceled. This decision had been appealed by the Memphis Keeley Institute, on the ground that the Keeley Company had built up and maintained its business by fraudulent representations; did not, in fact, come into court "with clean hands," and therefore, is not entitled to the protection which had been granted it by the lower court. The higher court maintained that there was abundant evidence to prove that the Keeley business obtained its start, and has reached its eminence, by gross misrepresentations, and that a company thus preying upon the public should not be protected in its fraud by the court. For these reasons, the appeal was decided in favor of the Memphis institute.

The evidence showed conclusively that these remedies for the liquor, opium and tobacco habits are advertised as the "Double Chloride of Gold Cure," and that the company also has a remedy for neurasthenia, known as "Gold Neurotine." To make the claim that these medicines contain gold more impressive, the labels are in gold, and contain the words: "Gold cure for opium habit, gold cure for drunkenness, gold cure for tobacco habit," all in gold. It is also stated on the labels: "Gold is especially beneficial in its action on the mental forces. It gives the patient courage, hope and renewed will power, and is the only medical agent that will effectually and forever relieve all craving or necessity for alcohol in any form. The remedy can in no way act injuriously on the patient." Quotations are also made from the literature sent out by the company, showing that the statement that the remedies contain gold is again and again made.

The evidence showed, as every physician knows, that there is no such salt as the "double chloride of gold," and, furthermore, that there is no gold in any form whatsoever, in any of the so-called remedies.

Interesting light was thrown on the formation of the original Keeley Company by a witness, one F. B. Hargraves. Before connecting himself with Leslie E. Keeley, Hargraves had been a preacher in the Wesleyan Methodist Church in England and then a lawyer. This is another proof of the statement which Dr. McCormock has frequently made, that many quack doctors have previously been quack preachers. From the evidence of this man Hargraves, it appears that in 1880 both he and Dr. Keeley were residing in Dwight, Hargraves having few clients and Keeley few patients. Independently they saw some newspaper reference to a cure for drunkenness, and decided to try it on Pat Conafry, a saloon-keeper of that place. Pat took the stuff and in about a week lost his desire for whiskey. However, he made strenuous efforts to drink again, and "one Sunday got a drink to stick and became gloriously drunk," after which he would take the medicine no more. This testimony was sufficient for Hargraves, who formed a partnership with

Keeley. This was the origin of the cure business, the company being known as that of "Leslie E. Keeley, M. D." The cure was then tried with good effect on Major Campbell of Kentucky, and he came into the firm. In 1881 a company was formed with the same name between Keeley, Hargraves, J. R. Oughton, a drug clerk, Major C. J. Judd and Mr. James Halpin, a Catholic priest of Dwight. Keeley did not appear personally, and would say, "I am the big spider in the back office, always throw a little mystery around me, keep me in the background." The drug clerk was the manufacturer and Hargraves the advertiser.

Hargraves further testified that he knew the formula, and that the remedies contained no gold. Gold had been used but once. The third patient treated, a sewing machine agent named Daliba, of Bloomington, was given chloride of gold and sodium in pill form. It nearly killed the man, and the gold pill was never afterward employed. Some other remedy was hit upon, but they never gave up the name "gold cure." Keeley claimed that it sounded well and justified its use by saying that there is "gold in everything, gold in sea water, in mud—in everything. There is a trace of gold in it and that is enough." In the safe at the laboratory they kept a few drams of gold chlorid and these were shown to visitors as samples of the ingredients of the sterling remedies.

Hargraves relates that they were constantly assailed by persons claiming that there was no gold in the remedies. To offset this they called on S. T. K. Prime, a distinguished citizen of Dwight, to help them out of the dilemma. Prime justly bore a good reputation all over the state, and, of course, would not be a party to any fraud. At the instance of the proprietors, Mr. Prime came to their laboratory and picked two bottles from the stock prepared for shipment and carried them to Professor Marriner, a Chicago chemist, for analysis. Before Prime did this, Oughton fixed up two bottles with gold in them and put them in a row that was half full of bottles. They were the last two bottles in the row, and naturally Prime selected those two bottles, as they were the nearest to him and came first to his hand. Of course

Professor Marriner found gold in the mixture submitted to him and they obtained a certificate from Prime as to his having selected the bottles from those in the laboratory prepared for shipment, and another certificate from Marriner as to the result of his analysis, and both were circulated in the course of the business. The testimony used to controvert that of Hargraves seemed unconvincing to Judge Cochran, justly so as appears from his review of it.

The Keeley Company held further that even if the remedies did not contain gold this is no reason why they should not be protected. In denying their right to protection the judge quotes the well-known case of the Fig Syrup Company against Stearnes, restraining them from using the name "Fig Syrup." The injunction was not granted because it was shown that the original company fraudulently represented to the public that the chief ingredient was the syrup of figs, although there was but a trace of the latter, the main ingredient being senna. Judge Taft in denying the injunction said: "This is a fraud upon the public. It is true it may be a harmless humbug to palm off on the public as syrup of figs what is syrup of senna, but it is nevertheless of such a character that a court of equity will not encourage it by extending any relief to the person who seeks to protect a business which has grown out of and is dependent upon such deceit." In no branch of business will this principle of refusal to protect a fraudulent article be more applicable than in the manufacture of patent medicines. There has been at least one other decision along the same line, and it is to be hoped that more will follow.

Oughton was the prominent figure in the trick played on Prime and Professor Marriner. Oughton has been president of the concern since Keeley died Feb. 21. 1900.

We thus see that Dr. Keeley's memory must go down to posterity, instead of being honored and revered, as a common swindler and faker, and the institution at Dwight will probably soon pass into history as another example of the gullibility of the public. Would it not be advisable to bring this exposure to the attention of every member of the legislature and

every public-spirited citizen of Illinois in order to prevent disgraceful exhibitions of official stupidity in the future?—Illinois Medical Journal.

Communications

Bentonville, Ark.

May, 1908.

To the Editor:

Allow me to congratulate you upon the many excellencies of the program issued for work at the coming meeting of our State Medical Society; it is indeed good.

I regret exceedingly my inability to attend this meeting of the Society, it will certainly be an interesting one, and surely a profitable one to its membership.

You will please excuse me while I make a suggestion, which is the result of many years of careful observation. It is suggested that fewer papers should be read before the Society and that more time should be given to extemporaneous and informal debates upon subjects of practical interest and importance; the prevailing diseases, endemic troubles, with the treatment adopted in regard to them. Every physician would go far to listen to such debates, to contribute to them, to enjoy them, while the dread of having to listen frequently to poor and tedious compilations would keep him inflexibly at home. I suggest that fewer papers be read and more time spent in debate. Do this and its results will be long felt.

I have been laboring for the organization and maintenance of medical societies for over fifty years, and am now rejoiced to see the success attained in medical organizations. There are now very few physicians who under-rate the value and importance of medical societies; their value to themselves, to the state in which they are located, and to the medical profession at large. Let every physician use his best influence for their creation, for their development and support.

The State Medical Society ought to be and can be a great body; for the accomplishment of this patriotic and professional purpose every physician in the state should give his best thoughts and most earnest work.

These are suggestions earnestly offered for consideration and action.

Hoping you may have a pleasant and profitable meeting of the Society, I am,

Yours truly,

Thos. W. Hurley, M. D.

Alumni Notes

The McGill University Alumni will hold a banquet at the Great Northern Hotel, Tuesday evening, June 2, 1908. during the American Medical Association meeting in Chicago. The committee in charge of the banquet is as follows: D. R. MacMartin, M. D., J. Brown Loring, M. D., and Andrew Stewart, M. D.

Andrew Stewart, M. D.,

Member of A. M. A. Alumni Com.

The local alumni of the University of Maryland will give a smoker and buffet luncheon, during the meeting of the American Medical Association in Chicago, on the evening of June the 2, 1908, in the Victoria Hotel, northwest corner of Michigan Avenue and Van Buren street, to which their own and all other visiting alumni are cordially invited.

L. D. Gorgas,

Member of A. M. A. Alumni Com.

There will be a dinner and reunion of the Harvard Medical Alumni at the Great Northern Hotel during the meeting of the American Medical Association, Tuesday, June 2, 1908. at 6 p. m., to which every Harvard man then in Chicago is earnestly bidden to come. Please notify the undersigned as soon as possible so that proper provision may be made.

A register of Harvard men will be kept at the Alumni headquarters in the Auditorium, where information, etc., may be obtained.

Henry F. Lewis,

Member of A. M. A. Alumni Com.

42 Madison St., Chicago.

The members of the Alumni Association of the Western Pennsylvania Medical College (Medical Department of the Western University of Pennsylvania) attending the meeting of the American Medical Association in

Chicago, June 2-5, 1908, will hold a reunion and Dutch luncheon at the Tom Jones Cafe, 175 Jackson Boulevard, Tuesday evening, June 2, at 7 p. m. All members take notice that this is the only invitation which they will receive. Everyone is expected, so do not fail to come and meet your college friends and classmates. Members are requested to register at the General Alumni Headquarters, at the Auditorium Hotel, corner Michigan Avenue. and Congress street, as soon as possible after their arrival in the city.

Dr. H. E. Almes,

Member A. M. A. Alumni Com.

On the evening of June 2, 1908, an alumni dinner and entertainment in honor of the visiting medical women of the American Medical Association will be given at the Mid-day Club, First National Bank Building, corner of Dearborn and Monroe streets, by the Women's Alumnae Committee, the Medical Woman's Club of Chicago, and the Woman's State Medical Society. The medical women of Illinois hope that a large representation of women physicians of the A. M. A. will attend this year's session, as they are making a special feature of the Woman's Alumnae Reunion. At this dinner several important subjects will be discussed which are of special interest to all women in the profession.

Katherine Brainerd Rich,

Member of A. M. A. Alumni Com.

Special headquarters will be provided at the Auditorium Hotel for alumni of the Medical College of Ohio, during the coming meeting of the American Medical Association in Chicago. There will be a reunion of the alumni of this college, Tuesday evening, June 2, 1908, at the Bismarck Hotel, 180 E. Randolph street, where there will be a smoker and an entertainment. Further information can be obtained by addressing Dr. William H. Wilder, 103 State street. Chicago, Chairman of the Resident Alumni.

News Items

Dr. G. S. Brown, of Conway, accompanied by his son, left a few days ago for Chicago. Dr. Brown will attend the meeting of the American

Medical Association, and will remain over for the clinics to be held immediately after the meeting.

Dr. Vernon MacCammon, of Arkansas City, a familiar figure at the meetings of the State Medical Society, will be unable to attend the coming meeting, as he is a delegate to the National Drainage Convention which meets in Washington City on the 12th.

Dr. M. L. Norwood, of Lockesburg, and Dr. F. T. Murphy, of Brinkley, President and Secretary respectively of the State Medical Board of the Arkansas Medical Society, have left for Chicago to attend the clinics and the coming meeting of the American Medical Association.

Dr. Jas. H. Lenow, Dean of the Medical Department of the University of Arkansas, will deliver the annual address at the commencement exercise of the Kentucky Military Institute, May 27th. Dr. Lenow is an alumnus of the class of 1871, and this will be his first visit to his alma mater since graduation.

Dr. A. S. Buchanan, of Prescott, will return soon from London, England, where he has been for several months engaged in special post-graduate study. Dr. Buchanan is an alumnus of the University of Arkansas, Medical Department, class 1905.

Book Reviews

SYPHILIS—A TREATISE FOR PRACTITIONERS.

By Edward L. Keyes, Jr., A. B., M. D., Ph. D., Clinical Professor of Genito-Urinary Surgery, New York Polyclinic Medical School and Hospital; L. Keyes, Jr., A. B., M. D., Ph. D., Clinical Professor of Genito-Urinary Surgery, New York Polyclinic Medical School and Hospital; Lecturer on Surgery, Cornell University Medical School; Surgeon to St. Vincent's Hospital. With sixty-nine illustrations in the text and nine plates, seven of which are colored. Pp. 577. New York and London: D. Appleton & Company. 1908.

This work is based upon 2,500 cases of syphilis observed and recorded in the office of the author and his distinguished father, covering a period of forty years. The case books of the

late Dr. Van Buren have also been drawn upon giving, we might say, a syphilitic retrospect of sixty years. A book reflecting only the studies and observations of two of America's great syphilographers would be sufficient to commend it to the student and practitioner; but the author has drawn from all sources for his knowledge and the very latest expositions have been presented.

"Syphilis in its Relation to Public Health," is the title of the first chapter, and is indeed a charming introduction to the work. Syphilis and Matrimony, and the Prophylaxis of Syphilis, are soundly discussed. In speaking of the prevalence of syphilis, the startling statement is made that the army records show that in 1904 there were 166 discharges for this disease whereas only 101 from tuberculosis.

Just at this time of course all interest centers about the study of the *Spirochæta pallida* of Sshaudinn. Whether it is the cause of syphilis or one phase of the life-cycle of some micro-organism which is the cause, is yet to be determined. The author is hopeful that the problem will be solved at some future time. Methods of staining the *Spirochæta* are given and plates are introduced showing the stained organism.

The chapter on tabes is interesting, the author holding to the opinion that tabes is almost always syphilitic in origin and paresis frequently so. He does not deny however, the contributing influences of civilization and the strain of city life.

Chapters XII and XIV deal with treatment. The various methods are all mentioned and the intramuscular especially receiving commendation. The author prefers an insoluble to a soluble salt of mercury for this purpose. He holds that the iodids act more efficiently when combined with mercury and introduces the history of cases to prove this statement.

We cheerfully commend this book to those who wish a late work on the "disease universal." Aside from the great fund of information it contains, it cannot be read without admiring the author's clear, concise, and sometimes dogmatic, expressions. The style is indeed charming and almost classical.

A TEXT BOOK OF MINOR SURGERY. By Edward Milton Foote, A. M., M. D., Instructor in Surgery College of P. & S.; Lecturer in Surgery in N. Y. Polyclinic; Visiting Surgeon N. Y. City Hospital and St. Joseph Hospital, etc. D. Appleton & Co., New York and London. Price, \$5.00.

Believing that minor surgery has not received the recognition it deserves in the curriculum of our medical colleges, Dr. Foote commenced eight years ago to prepare a work that would present to the average practitioner the lesser surgical problems encountered in his every-day practice. To say that he has succeeded is to tell but part of the truth, for he has presented a book that is so clean, clear, and best of all, shorn of those subjects that have no place outside of works on general surgery, that it is a pleasure to speak the words of praise that are justified after a thorough examination of its contents.

The book contains over seven-hundred pages and the subjects are discussed under eight sections and twenty-two chapters. These embrace generally affections of the head, neck, trunk, genito-urinary organs, anus and rectum, arm and hand, leg and foot. The eighth section deals with minor surgical technique, the last

chapter of which gives a splendid description of surgical dressings, ligatures and sutures, drains and splints. The paper is heavy, binding good and illustrations numerous.

DISEASES OF THE GENITO-URINARY ORGANS AND THE KIDNEY. By Robert H. Green, M. D., Professor of Genito-Urinary Surgery at the Fordham University, New York; and Harlow Brooks, M. D., Assistant Professor of Pathology, University and Bellevue Hospital Medical School. Octavo of 536 pages, profusely illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$5.00, net; Half Morocco, \$6.00, net.

This work, written conjointly by a surgeon and a physician, presents the subject of genito-urinary diseases in a very clear and practical manner. There is not very much new to be said about such subjects, but the authors have limited their labors to the methods that they have been found most useful in their practice.

One hundred and thirty-seven pages are devoted to diseases of the kidneys, every page of which is interesting. The chapter on diseases of the prostate is the best in the book and is a very satisfactory exposition of the subject. The illustrations are good and numerous.

OFFICERS OF THE AMERICAN MEDICAL ASSOCIATION, 1907-1908

Next Annual Session, Chicago, Ill., June, 1908.

President—Joseph D. Bryant, New York, N. Y.
President-Elect—Herbert L. Burrell, Boston, Mass.
First Vice-President—Edwin Walker, Evansville, Ind.
Second Vice-President—Hiram L. Burton, Lewes Del.
Third Vice-President—George W. Crile, Cleveland, O.
Fourth Vice-President—W. Blair Stewart, Atlantic City, N. J.
General Secretary—Geo. H. Simmons, 103 Dearborn Ave., Chicago.
Treasurer—Frank Billings, Chicago.
Board of Trustees—E. E. Montgomery, Vice-Chairman, Philadelphia, 1908; A. L. Wright, Carroll, Iowa, 1908; H. L. E. Johnson, Washington, D. C., 1908; William H. Welch, Baltimore, 1909; Miles F. Porter, Ft. Wayne, Ind., 1909; M. L. Harris, Secretary, Chicago, 1909; T. J. Happel, Chairman, Trenton, Tenn., 1910; W. W. Grant, Denver, Colo., 1910; Philip Marvel, Atlantic City, N. J., 1910.

Judicial Council—C. E. Cantrell, Chairman, Greenville, Texas; R. C. Cabot, Boston; G. W. Guthrie, Wilkes-Barre, Pa.; Thos. McDavitt, St. Paul, Minn.; Chas. J. Kipp, Newark, N. J.

Council on Medical Education—Arthur D. Bevan, Chairman, Chicago; W. T. Councilman, Boston; James W. Holland, Philadelphia; Victor C. Vaughan, Ann Arbor, Mich.; J. A. Witherspoon, Nashville, Tenn.

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Bureau of Medical Legislation—Charles A. L. Reed, Chairman, Cincinnati; W. L. Rodman, Philadelphia; C. S. Bacon, Chicago.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY, 1907-1908

Next Annual Meeting, Little Rock, May 13-15, 1908.

President—C. C. Stephenson, Little Rock.
First Vice-President—M. Fink, Helena.
Second Vice-President—J. L. Butler, Sheridan.
Third Vice-President—C D. Stephens, Magnolia.
Treasurer—J. W. Scales, Pine Bluff.
Secretary—Morgan Smith, Little Rock.

COUNCILORS.

First District—W. E. Hughes, Walnut Ridge.
Second District—J. M. Jelks, Searcy.
Third District—W. H. Deadrick, Marianna.
Fourth District—B. D. Luck, Pine Bluff.
Fifth District—J. T. Henry, Eagle Mills.
Sixth District—R. H. T. Mann, Texarkana.
Seventh District—J. C. Wallace, Arkadelphia.
Eighth District—J. S. Westerfield, Conway.
Ninth District—Sam G. Daniels, Marshall.
Tenth District—C. E. Hurley, Bentonville.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION.

E. K. Williams, Arkadelphia, one year.
 Adam Guthrie, Prescott, two years.

First Alternates.

Wm. Crutcher, Pine Bluff, one year.
 C. E. Hurley, Bentonville, two years.

Second Alternates.

H. A. Longino, Magnolia, one year.
 J. W. Meek, Camden, two years.

OFFICERS OF SECTIONS.

Medicine—H. Thibault, Chairman, Scott; C. J. March, Secretary, Fordyce.

Surgery—A. G. Dickson, Chairman, Paragould; H. H. Rightor, Secretary, Helena.

Obstetrics and Gynecology—C. P. Meriwether, Chairman, Little Rock; W. S. Lindsey, Secretary, DeQueen.

Dermatology and Syphilology—A. W. Williams, Chairman, Hot Springs; A. A. Evans, Secretary, Bethesda.

Pathology—W. S. Stewart, Chairman, Pine Bluff; C. D. Glover, Secretary, Pine Bluff.

State Medicine and Public Hygiene—J. P. Shepard, Chairman, Little Rock; Oscar Gray, Secretary, Little Rock.

Diseases of Children—H. P. Routh, Chairman, Fort Smith; N. S. Word, Secretary, Camden.

COUNCILOR DISTRICTS AND COUNCILORS

1907-8

First Councilor District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph counties. Councilor: J. E. Hughes, Walnut Ridge. Term of office expires 1909.

Second Councilor District—Clebune, Fulton, Independence, Izard, Jackson, Sharp and White counties. Councilor: J. M. Jelks, Searcy. Term of office expires 1908.

Third Councilor District—Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff counties. Councilor: W. H. Deadrick, Marianna. Term of office expires 1909.

Fourth Councilor District—Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln counties. Councilor: B. D. Luck, Pine Bluff. Term of office expires 1908.

Fifth Councilor District—Calhoun, Columbia, Dallas, Lafayette, Ouachita, and Union counties. Councilor: J. T. Henry, Eagle Mills. Term of office expires 1909.

Sixth Councilor District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier counties. Councilor: R. H. T. Mann, Texarkana. Term of office expires 1908.

Seventh Councilor District—Clark, Garland, Hot Spring, Montgomery, Saline, Scott and Grant counties. Councilor: J. C. Wallis, Arkadelphia. Term of office expires 1909.

Eighth Councilor District—Conway, Johnston, Faulkner, Perry, Pulaski and Yell counties. Councilor: J. S. Westerfield, Conway. Term of office expires 1908.

Ninth Councilor District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren counties. Councilor: Sam G. Daniels, Marshall. Term of office expires 1909.

Tenth Councilor District—Benton, Crawford, Franklin, Logan, Sebastian, Madison and Washington counties. Councilor: C. E. Hurley, Bentonville. Term of office expires 1908.

COMMITTEES 1907-1908

Board of Visitors University of Arkansas, Medical Department—M. Y. Pope, M. D., Monticello; W. N. Yates, M. D., Fayetteville; F. W. Youmans, M. D., Lewisville; H. Moulton, M. D., Fort Smith; A. C. Jordan, M. D., Pine Bluff.

Committee on State Legislation and Public Policy—O. H. Williamson, M. D., Chairman, Marianna;

Vernon MacCammon, M. D., Arkansas City; L. H. Hall, M. D., Pocahontas.

Committee on Scientific Work—S. S. Stewart, M. D., Little Rock; W. A. Snodgrass, M. D., Little Rock; Morgan Smith, M. D., Little Rock.

STATE BOARD OF MEDICAL EXAMINERS

First District—M. Fink, M. D., Helena.

Second District—F. T. Murphy, M. D., Secretary, Brinkley.

Third District—G. V. Poyner, M. D., Green Forrest.

Fourth District—M. L. Norwood, M. D., Lockesburg.

Fifth District—Geo. S. Brown, M. D., Conway.

Sixth District—Vernon MacCammon, M. D., Arkansas City.

Seventh District—J. W. Meek, M. D., Camden.

OFFICERS OF COMPONENT SOCIETIES

County Society.	President.	Secretary and Address	Members.
Arkansas.....	W. W. Lowe.....	C. E. Park.....DeWitt.....	14
Ashley.....	J. W. Simpson.....	E. M. Scott.....Hamburg.....	15
Baxter.....	J. A. Hipp.....	J. J. Morrow.....Cotter.....	5
Benton.....	H. E. Thomason.....	C. A. Rice.....Gentry.....	27
Boone.....	F. B. Kirby.....	L. Kirby.....Harrison.....	14
Bradley.....	B. H. Green.....	W. T. Fike.....Warren.....	11
Calhoun.....	D. F. Wilson.....	T. E. Rhine.....Thornton.....	5
Carroll.....	C. A. George.....	Henry Pace.....Eureka Springs.....	16
Chicot.....	M. M. Norton.....	E. P. McGeehee.....Lake Village.....	10
Clay.....	M. C. Hughey.....	N. J. Latimer.....Corning.....	11
Clark.....	W. T. Rowland.....	N. R. Townsend.....Arkadelphia.....	14
Cleveland.....	Chas. Leali.....	J. F. Crump.....Rison.....	15
Columbia.....	C. D. Stevens.....	J. C. Walker.....Emerson.....	11
Conway.....	B. C. Logan.....	G. W. Ringgold.....Morriton.....	14
Craighead.....	C. M. Lutterloh.....	W. C. Halton.....Jonesboro.....	10
Crawford.....	J. D. Youart.....	M. S. Dibrell.....Van Buren.....	19
Dallas.....	C. J. March.....	W. H. Simmons.....Fordyce.....	8
Desha.....	F. L. Duckworth.....	S. D. Wheat.....McGeehee.....	10
Drew.....	W. A. Brown.....	A. S. J. Collins.....Monticello.....	16
Faulkner.....	J. F. Brown.....	J. F. Westerfield.....Conway.....	15
Franklin.....	H. H. Turner.....	Thos. Douglass.....Ozark.....	11
Grant.....	J. B. Shaw.....	J. L. Butler.....Sheridan.....	2
Greene.....	Thad Cothorn.....	W. R. Owens.....Paragould.....	16
Hempstead.....	J. H. Weaver.....	W. A. Briant.....Hope.....	14
Hot Springs-Garland.....	D. H. Burton.....	M. F. Mount.....Hot Springs.....	52
Hot Spring.....	E. T. Bramlet.....	E. H. McCray.....Malvern.....	7
Howard-Pike.....	C. W. Wright.....	W. H. Tolland.....Mineral Springs.....	11
Independence.....	W. D. Hankins.....	W. B. Lawrence.....Batesville.....	9
Jackson.....	H. O. Walker.....	G. K. Stephens.....Newport.....	13
Jefferson.....	G. M. Duckworth.....	John S. Jenkins.....Pine Bluff.....	24
Johnson.....	W. R. Hunt.....	L. A. Cook.....Clarksville.....	18
Lafayette.....	D. W. Bright.....	L. W. Youmans.....Lewisville.....	10
Lawrence.....	J. B. Pringle.....	H. R. McCarroll.....Walnut Ridge.....	19
Lee.....	W. S. Beatty.....	W. H. Deadrick.....Marianna.....	13
Little River.....	W. L. Shirley.....	W. E. Vaughn.....Richmond.....	4
Lincoln.....	J. K. McClain.....	B. F. Tarver.....Star City.....	8
Lonoke.....	W. S. Turner.....	O. D. Ward.....England.....	17
Logan.....	E. T. Powell.....	J. S. Shibley.....Paris.....	14
Madison.....	W. A. Moore.....	G. D. Counts.....Wesley.....	3
Miller.....	J. R. Dale.....	R. H. T. Mann.....Texarkana.....	18
Mississippi.....	C. C. Stephens.....	T. G. Brewer.....Osceola.....	22
Monroe.....	E. D. McKnight.....	R. L. Saxon.....Holly Grove.....	14
Nevada.....	G. O. Marsh.....	J. S. Chastain.....Prescott.....	10
Ouachita.....	J. W. Meek.....	N. S. Word.....Camden.....	18
Perry.....	M. E. Howard.....	W. S. Blackwell.....Fourche.....	5
Phillips.....	G. E. Penn.....	W. C. King.....Helena.....	18
Pope.....	J. M. Campbell.....	L. Gaddy.....Atkins.....	9
Polk.....	D. W. Bright.....	C. C. Gunnels.....Mena.....	19
Prairie.....	W. W. Hippolite.....	J. R. Lynn.....Hazen.....	8
Pulaski.....	Anderson Watkins.....	Mahlon D. Ogden.....Little Rock.....	68
Randolph.....	P. M. Shaver.....	W. E. Hughes.....Pocahontas.....	19
Saline.....	J. W. Melton.....	Chas. J. Steed.....Hurricane.....	13
Searcy.....	S. G. Daniel.....	J. E. Reece.....Marshall.....	6
Sebastian.....	J. R. Gant.....	W. R. Brooksher.....Fort Smith.....	45
Sevier.....	J. P. McGee.....	W. S. Lindsey.....DeQueen.....	18
Sharp.....		T. J. Woods.....Evening Shade.....	
St. Francis.....	D. O. Bridgeforth.....	J. C. Strong.....Forrest City.....	12
Union.....	John A. Moore.....	J. B. Wharton.....El Dorado.....	21
Washington.....	D. Christian.....	Jas. R. Southwarth.....Fayetteville.....	10
White-Cleburne.....	L. E. Moore.....	J. J. Moncrief.....Beebe.....	16
Woodruff.....	R. G. Patterson.....	T. B. Bradford.....Cotton Plant.....	13
Yell.....	M. A. Worsham.....	A. H. McKenzle.....Dardanelle.....	20

Total membership972



